CONSULTATION DOCUMENT

The Kent Environment Strategy

A high quality environment for a flourishing Kent, now and in the future

October 2009

Consultation Document

This consultative document is a starting point to stimulate discussion. It outlines what the Kent Partnership believes are the environmental opportunities and challenges facing the county.

We welcome your views on the key priorities for improvement and action identified in the Kent Environment Strategy either by post or email, by **Friday 15 January 2010**.

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Introduction

Why do we need a new environment strategy?

Kent has achieved much in advancing environmental performance the past six years since the publication of the 2003 Kent Environment Strategy. However the progress report of 2007 and more recent evidence of Kent's ecofootprint shows the key indicators of environmental wellbeing need improvement. Along with other south-east counties our 'shoe size' is estimated to be three and half sizes too big!

We still have challenges to tackle, not least of which are: development pressures; ongoing concerns about air and water quality; continuing decline in biodiversity; and the threat of dangerous climate change. These are brought home to us by water shortages, heatwaves and seasonal floods. Some of these challenges, while having the potential for severe economic and social impacts, can also offer opportunity for new business, increased efficiency for residents, and the public and commercial sectors.

We now must take action on the appropriate scale and such that the challenges we face are converted into opportunities for economic and social gain. This is what this strategy sets out to achieve.

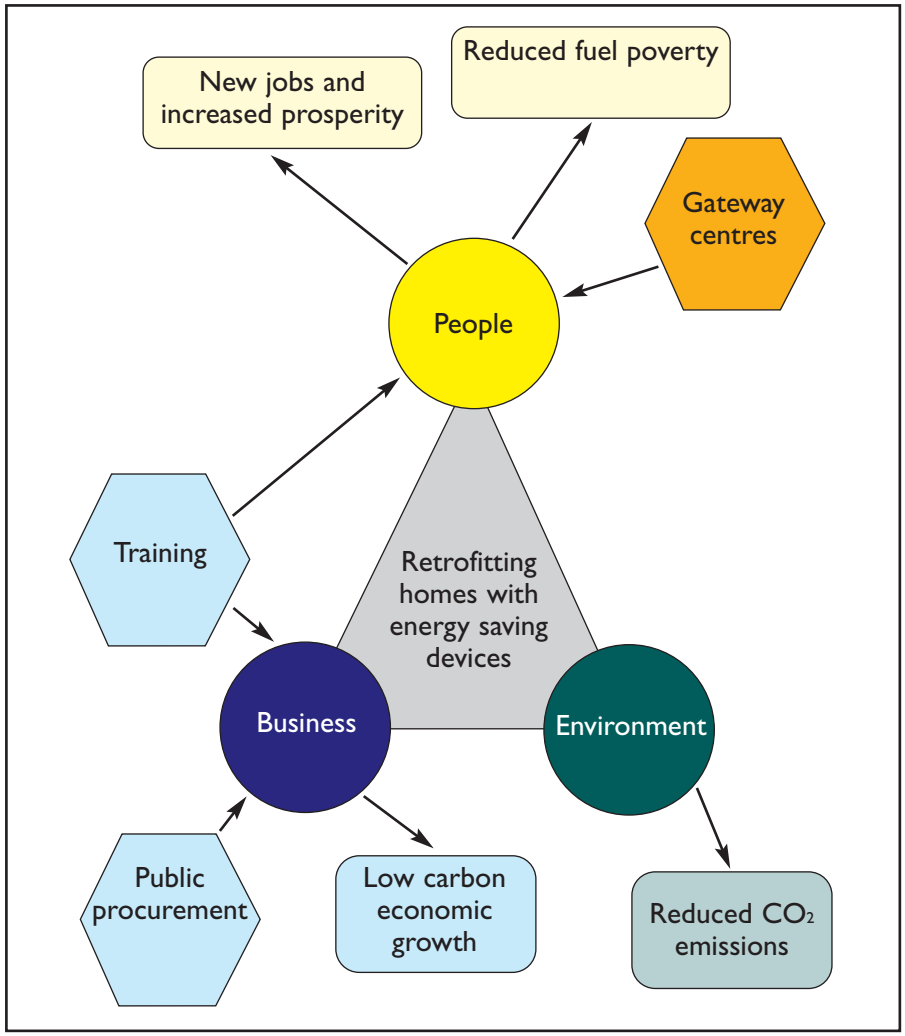
Who is this Strategy for?

This Strategy supports delivery of Kent's Community Strategy, the 'Vision for Kent' and is part of a suite of eight strategies that lay out the Kent Partnership's objectives (listed in Annex) for Kent to achieve a better place to live, work and visit.

The Kent Environment Strategy will be delivered by the Kent Partnership by acting as a prioritisation framework for action by all key public agencies, business and commerce in Kent .

What will be different in Kent as a result of this Strategy?

This draft strategy is taking a much more focused approach in contrast to its predecessor which has 11 themes and 41 objectives. What is vital is that this time we identify environmental objectives with far reaching effects which help deliver wider social and economic aims. For example:



Three themes are identified to resonate with the Regional Economic Strategy, the Vision for Kent and KCC's Regeneration Strategy. This will also enable stronger synergies with other strategies in the Kent Partnership suite as a better foundation for delivery across all functions.

What action are we going to take?

This Strategy is organised into **three themes** which represent the major challenges and opportunities for Kent over the next 10-20 years.

Prosperity within our environmental limits – Leading Kent towards consuming less resources more efficiently, eliminating waste and minimising pollution.

Rising to the climate change challenge – Working towards a lower carbon Kent which is prepared for, and resilient to, the impacts of climate change.

Value from our natural and living environments – Optimising the real economic and social benefits of high environmental quality while protecting and enhancing the unique natural and built character of Kent.

There is a great deal of activity already happening across Kent to support the vision of sustainable living described by these themes. We want to see this variety of projects continue to flourish. However the Kent Partnership wish to identify three or four priorities, under each theme, on which we can focus in the next three years in order to take our first big step towards reaching our 20 year vision.

How will the Strategy be delivered?

The delivery of the Strategy will be supported by action plans under each of the Key themes' objectives. These will focus on key mechanisms and projects which could be tweaked and refreshed on an annual basis. Particularly important will be the degree to which the other emerging strategies can embrace the opportunities offered here, for example, the Environmental Technologies Sector strategy, the Transport Strategy and the Housing Strategy.

The implementation of this Strategy will be underpinned by five principles that will inform the way we work

- Total Kent - We will look at Kent and Medway as a whole and work in partnership to find and deliver cross-sector solutions.
- Empowered Kent - We will empower communities and businesses, as well as individuals and give them the opportunities they need to be sustainable.
- Value for Kent - We will maximise the potential of the environment to deliver a full range of benefits for Kent people – health, jobs and recreation - and we will make choices that represent long term value for money.
- Inspired Kent - We will look across the world to find the best in innovation and solutions for encouraging green technology business growth, challenging the status quo where it is a barrier to progress.
- I will if you will - The Kent Partnership will lead the way by demonstrating good practice within its own members' operations.

Monitoring

The progress report of 2007 issued a wake-up call but did anyone wake-up? Much of what action was promised was delivered but the vision for an improved environment is still a long way off with water and air quality declining, CO2 still rising and wild bird populations in trouble (as examples).

We will devise a set of performance indicators to accompany the final strategy which will measure the change in the environment not just action undertaken.

Consultation process and timetable

The vision, objectives and suggested priority action in this consultation document arise from small group workshops held with expert stakeholders from across Kent. We are now seeking your views on what action we should be taking in Kent to improve the sustainability of our county. Your responses to this consultation will inform the direction of travel in the coming years and so determine what changes this Strategy can achieve for Kent.

It asks for your feedback on a number of questions after each of the theme chapters to shape the final version of the strategy and which three priorities for action per theme should be included.

The next draft of the strategy will be written in December and this will refine the visions and reduce the long list of priorities for action to three or four per theme. It will also include an Action Plan of key activities to deliver the priorities over the next three years.

Prosperity within our Environmental Limits

Vision for 2030

A Kent where we produce and use sustainable goods and services and throw away as little as possible. All Kent businesses benefit from operating in a sustainable way and we are the first choice location for green technology companies. As a result of these sustainable operations and lifestyles our natural resources - air, water, minerals and soil - are clean and safeguarded and Kent secures the resources it needs to prosper.

Target

By 2016 Kent will reverse the annual growth in its ecological footprint on the way to a 40% decrease by 2030.

Rationale

Our quality of life in Kent has been increasing year on year and we have been enjoying ever more plentiful lifestyles. However, we are part of a global community that is currently depleting natural resources at a faster rate than they can be regenerated as well as using non-renewable resources at an increasing rate. As a consequence three quarters of the world's fisheries are facing commercial collapse, one quarter of the birds and mammals on earth are in danger of extinction, and we are losing two percent of the world's forests ever year[i,ii].

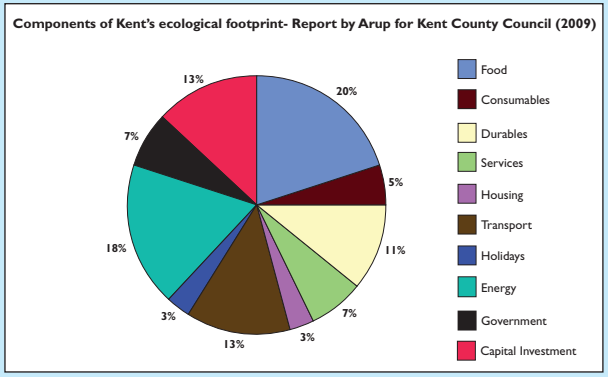
Our rates of consumption here in Kent will also be challenged by a changing balance in international power. On current growth rates, China will have the world's second largest market in terms of household consumption by 2014[iii]. The Commission for Africa has set out recommendations to enable African countries to achieve and sustain growth rates of seven per cent by 2010[iv]. Where will all the natural resources come from to make and use the products which will fuel this growth? Sustainable consumption is not a 'green dream' but an economic necessity.

Prosperity within our environmental limits is about reducing our environmental impacts, while maintaining or improving our economy and standards of living. This will not require us all to wear hair shirts but instead embrace new green technologies wherever possible and view our choices in a new light. For instance walking and cycling more, eating local foods, buying more durable goods rather than disposable items, and taking holidays in the UK. The potential of such changes are that Kent can grow green technology businesses and all business and households can save money by doing more with less.

Ecological Footprint

The 'ecological footprint' is a methodology to illustrate the impacts of what we consume by calculating the notional and direct land and sea area needed to support the resources and associated energy a particular population consumes and to absorb the wastes they generate. If each person on the planet were to have an equal share of globally available land we would each have less than two hectares available to us.

In Kent we use six global hectares per person to support our lifestyles, although this number fluctuates across the county. If everyone in the world lived as we do we would need 3.3 planets, and our county's demands on natural resources are increasing. If we don't make changes we could be consuming at a rate as high as 10.5 ha per person by 2050.



Kent Facts

Waste

- 31% of municipal waste to landfill 2008/09.
- 473, 000[1] tonnes commercial and industrial waste to landfill in 2002.
- 662,000 tonnes construction and demolition waste to landfill in 2006.

Food

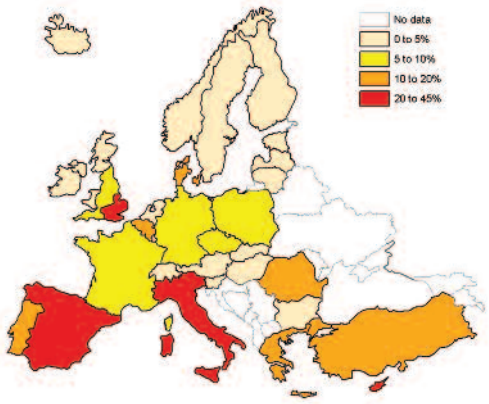
- Responsible for 20% of UK greenhouse gases and 20% of Kent's ecological footprint.
- The majority of the impact of food occurs through the production and processing of the food item with transportation being a secondary issue (unless the food has been transported by aviation). We then throw away, uneaten, around one third of the food we buy.
- Farmland covers 67% of the land area in Kent.
- Farm holdings make a £600 million contribution to the Kent economy.

[1] Waste arising in Kent

Water

- 99.34% of Kent's rivers met good or fair biological quality standards in 2007.
- 93.71% good or fair chemical quality standards in 2007.
- 73% of our bathing waters met excellent standards, 23% were good and 3% failed.[2]
- Over 90%of our groundwater bodies are at risk from diffuse pollution[v].
- Water usage per person in Kent is 160 litres per person per day, one of the highest in the country.
- Kent is in a similar water exploitation category (amount of water abstracted as a proportion of effective rainfall) as Southern Italy and Malta, making us very vulnerable in drought situations.

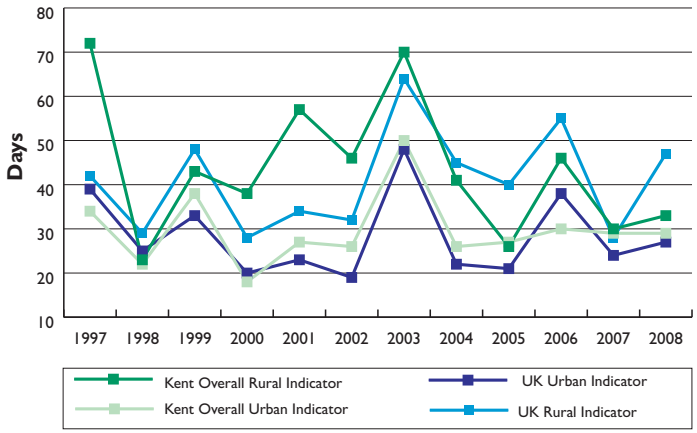
Water exploiation index (actual abstraction as a proportion of effective rainfall) [vi]**.** (Environment Agency 2009)



Air quality

- Our understanding of air quality in Kent continues to grow and the District Councils have had to set up 33 Air Quality Management Areas to tackle unacceptable concentrations of pollution, usually associated with traffic congestion.

Number of days when air pollution was 'moderate' or worse



[2] This relates to one beach and was due to an incident at a sewage treatment plant which has been rectified.

Objectives

In order to deliver our 20 year vision the Kent Partnership will need to use all its suite of Strategies, in particular Integrated Transport, Housing, Regeneration, Sectors and Skills to:

- Enable residents and businesses to consume at sustainable levels by offering smart choices for the way we live, work and travel, for example, Fast Track provides the option to leave the car at home, opportunities for commercial recycling reduces the waste to landfill, Kent foodstuffs offer an alternative to imports.
- Reduce the negative impact of consumption by understanding the lifecycle of products and supporting lean and clean production methods and service provision. For instance supporting low input farming / precision farming to minimise the release of chemicals into our ground water and rivers.
- Use resources more efficiently by reducing waste, enabling reuse and recycling, and optimising energy from waste.
- Maximise the opportunities from these changes in our behaviours to create Kent markets for organisations providing green products, services and technologies.

Action

There is a great deal of activity happening across Kent to support sustainable living. We want to see this variety of projects continue to flourish. However the Kent Partnership wish to identify three or four priorities on which we can focus in the next three years in order to take our first big step towards reaching our 20 year vision. By 2012 we will have delivered these and would want to identify a new set of priorities to continue our journey.

We have attempted to very roughly categorise cost and impact of each of the potential priorities as high, medium or low, relative to the other priorities. However, these are just indicative estimates as we do not have cost / benefit analyses for these potential actions as yet.

Potential priority actions for Living within our Environmental Limits are:

Reduce domestic water usage	
We need to manage water resources carefully with more attention to the reliability of water supplies for consumers and the consequences for the environment. EC (European Commission) Communication on water scarcity[vii] states that 'the first priority is to move towards a water-efficient and water saving economy'. This makes good economic sense; the Environment Agency estimate that each new house in the South East will cost £14,700 to supply with water and waste water treatment.[viii] To hit the aspirations in the England Water Strategy we should aim for a 4.5 litre reduction per head in the next three years.	
As a first step we could fit water saving devices and water metering into all newly built homes, according to level 3 of the Code for Sustainable Homes Standard, and retrofit 100,000 homes within our existing housing stock.	**Cost: high** **Impact: high**
Reduce waste arising and going to landfill	
We are working to reduce all waste via the waste hierarchy. In particular focusing on food waste, as this has high greenhouse gas emissions, and construction waste, as this represents around a third of waste landfill.	
The Love Food Hate Waste campaign is already seeing a reduction in the food we throw away but we can do more. We could ramp up our efforts to tackle food waste. At a UK level we throw away about a third of the food we buy, costing the average household £400per year[ix].	**Cost: medium** **Impact: high**
We could work with builders and developers to increase efficiency by reducing construction and demolition waste and support them in delivering Site Waste Management Plans and reaching the industry's own target of a 50% reduction in waste to landfill by 2012.	**Cost: low** **Impact: high**

We could work with the waste reprocessing industry to find new markets for our recycled materials. Plastics could be a focus for this action as it is one of government's priority materials and markets for metals and paper are more established.	**Cost: ?** **Impact: ?**
Improve the biological and chemical quality of our rivers and groundwater to meet Water Framework Directive targets.	
We could establish a 'Regional Better Rivers Programme' to improve habitat and ecology in a first round of water improvement action.	**Cost: low** **Impact: high**
Support communities in improving their sustainability	
We could establish a competitive small grants scheme to support communities wishing to develop sustainable living solutions in their area.	**Cost: medium** **Impact: medium**
Reduce the footprint of the food chain in Kent	
We could commit to an increase in the amount of local food procured by public authorities.	**Cost: low** **Impact: medium**
We could promote low impact diets to Kent residents through Produced in Kent, particularly helping schools to familiarise children with more nutritious and sustainable diets through the Healthy Schools Programme.	**Cost: low** **Impact: medium**
We could encourage and support community cultivation of food through increasing availability of allotments and community gardens.	**Cost: medium** **Impact: ?**

Encourage urban design that increases the opportunities for residents to choose sustainable solutions	
By considering factors such as water supply and treatment, flood risks, sustainable transport, waste disposal, and energy demand, early in the design of new communities we can make sure that we build homes in the right way for the future[x].	
We could change the priority scoring for investment in highways to address Air Quality Management Area congestion	**Cost: low** **Impact: low**
We could work to build a consensus in planning policies across Kent to bring forward by three years the timescale to put in place a requirement for all new build to attain Level 4 of the Code for Sustainable Homes Standard.	**Cost: low** **Impact: high**
We could identify opportunities for exemplar new homes which are designed to improve sustainable living, for instance, include space for secure bike racks, recycling bins, grey water systems, local retail outlets, reduced drainage demand etc.	**Cost: high** **Impact: ?**

Consultation questions:

1. Do you agree with the 20 year vision?
2. Do you think the target is too ambitious / not ambitious enough?
3. Do you agree with the objectives?
4. From the list above which three actions do you think will make the most significant contribution towards delivering the objectives?
5. Do you have any additional priorities, not included in this consultation, to suggest to the Kent Partnership? What do you estimate would be their cost and Kent-wide impact?

Rising to the climate change challenge

Vision for 2030

A Kent with a thriving low carbon economy that drives a year on year reduction in greenhouse gas emissions. Our residents are protected from the financial and health risks of climate change and have increased wellbeing from 'local lifestyles'. The actions we have taken to prepare for the medium and longer term effects of climate change have enhanced the quality and distinctiveness of our landscapes and built environments with:

- Urban design that reduces the impact of extremes of temperature.
- Homes and businesses that are safe from flooding.
- Public services and transport networks that are resilient to severe weather events.
- Linked natural habitats so that wildlife can adapt to changing conditions.

Target

A 40% reduction in Kent's carbon dioxide emissions by 2030.

Rationale

We are seeing evidence that climate change is already happening in the UK - the ten hottest years on record have all been since 1990, plus an increase in flooding events. This is generally attributed to emissions from our ever increasing energy usage derived from burning of fossil fuels.

The UK Climate Projections show that Kent could be facing temperature increases of 1.6°C by 2020 and 2.3°C by 2040; 7% less summer rainfall by 2020 and as much as 12% less by 2040. In contrast winters in 2020 could see 7% more rain and 13% by 2040. In the last few years in Kent we have committed to addressing the threats posed by climate change by reducing our emissions and preparing for the impacts of altered weather conditions.

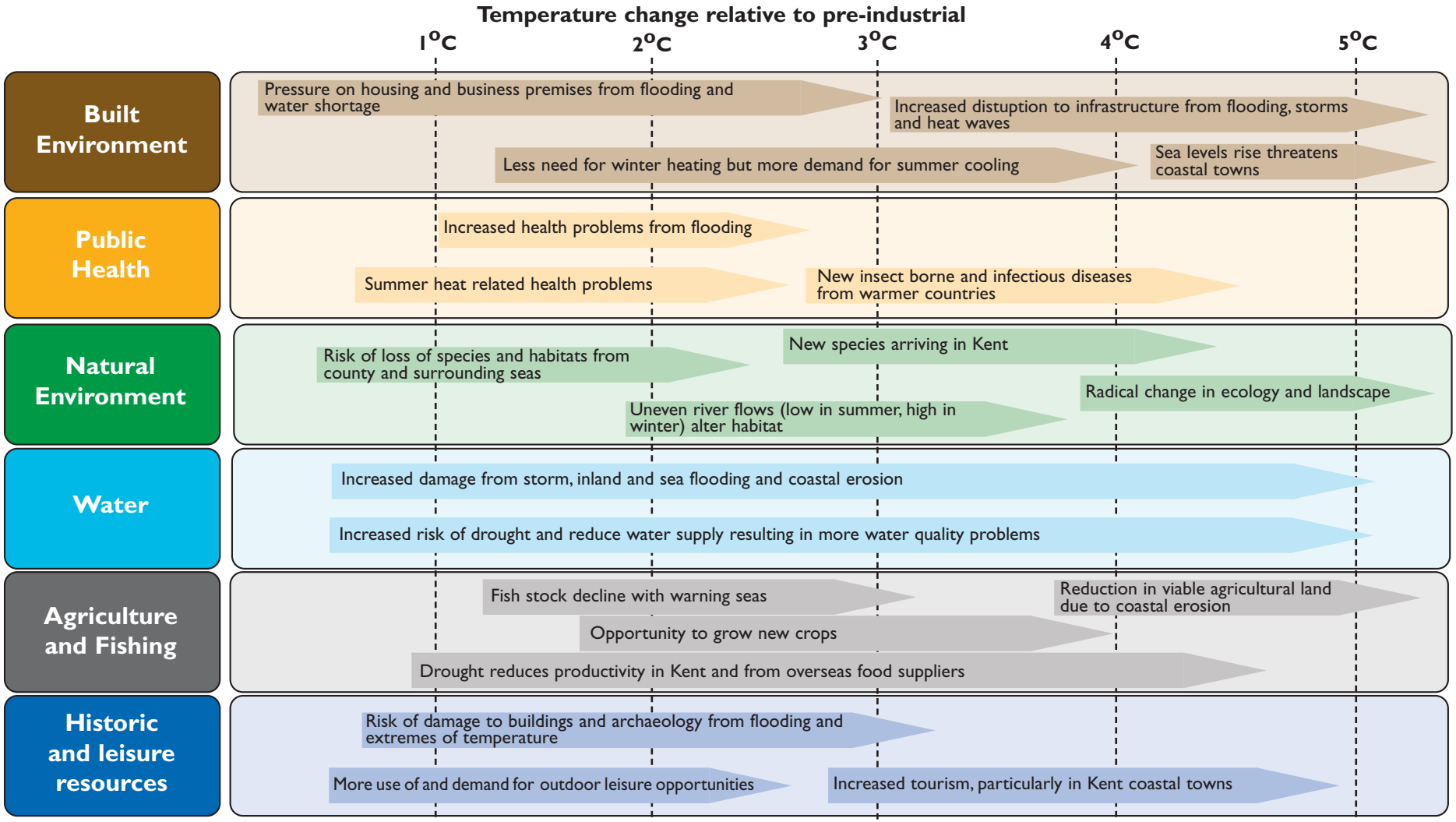
Whatever is done to reduce emissions in the future, past emissions mean that some climate change is already inevitable. This could lead to opportunities or problems depending on what we do now to prepare[3]. Our challenge is to prepare our homes, businesses, public services, transport networks and natural environment for these

[3] Stern Review (2007) calculates the cost of inaction will be equivalent to losing at least 5% of global GDP (Gross Domestic Product) each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more. In contrast, the costs of action – reducing greenhouse gas emissions to avoid the worst impacts of climate change – can be limited to around 1% of global GDP each year.

circumstances. Also to work to lessen these changes by contributing to the UK Climate Change Act target of reducing greenhouse gas emissions by 80% by 2050. We also will play a part in meeting the UK obligation under the EU (European Union) Renewable Energy Directive to derive at least 15% of the nation's final energy consumption from renewable sources by 2020.

Tackling climate change is not just an environmental issue. It will be about creating a stronger, safer and more sustainable Kent with businesses well prepared and managing the risks. The global market for low carbon goods and services is already worth around £3 trillion a year, and is predicted to grow by half that again by 2015[xi]. The move to a low carbon economy will bring costs as well as economic benefits. But the costs of doing nothing would be far greater[4].

[4] The Stern report estimates the cost of inaction on climate change mitigation to be between 5% and 20% of global GDP each year.


Temperature change relative to pre-industrial
1°C
2°C
3°C
4°C
5°C
Built Environment
Pressure on housing and business premises from flooding and water shortage
Increased distuption to infrastructure from flooding, storms and heat waves
Less need for winter heating but more demand for summer cooling
Sea levels rise threatens coastal towns
Public Health
Increased health problems from flooding
Summer heat related health problems
New insect borne and infectious diseases from warmer countries
Natural Environment
Risk of loss of species and habitats from county and surrounding seas
New species arriving in Kent
Radical change in ecology and landscape
Uneven river flows (low in summer, high in winter) alter habitat
Water
Increased damage from storm, inland and sea flooding and coastal erosion
Increased risk of drought and reduce water supply resulting in more water quality problems
Agriculture and Fishing
Fish stock decline with warning seas
Reduction in viable agricultural land due to coastal erosion
Opportunity to grow new crops
Drought reduces productivity in Kent and from overseas food suppliers
Historic and leisure resources
Risk of damage to buildings and archaeology from flooding and extremes of temperature
More use of and demand for outdoor leisure opportunities
Increased tourism, particularly in Kent coastal towns

Kent Facts

Greenhouse Gas

- Kent and Medway Carbon dioxide emissions in 2006[xii] were 8.98 tonnes per capita, a small reduction in the 2005 figures for efficiency from 9.00 tonnes per capita, but a small increase in the total from 14,628 Ktonnes.

Transport – Kent's options for tackling transport issues are covered in detail in the Integrated Transport Strategy rather than here in this document.

- Represents around a third of Kent's greenhouse gas emissions.
- Kent traffic flows have increased by 19 per cent since 1994.
- Overall the car (or van) is still the most popular method of getting about with 71% of journeys in Kent made by car.
- 20.4% of all Kent residents in employment work less than 2km from their home, a distance suitable for walking or cycling.
- Nationally, 57% of all car / van journeys were under five miles in length[xiii], a distance well suited for electric vehicles.

Energy

- In Kent we were using slightly less domestic electricity, 0.4%, in 2007 than we did in 2006[xiv]. However, we still use 5% more electricity per person in the South East than the national average[xv].
- Commercial and industrial electricity consumption has seen a more marked decrease between 2006 and 2007 by 3.5% (826.2 GWh2). However the South East consumes 9.7 % more electricity than the England average.

Severe weather

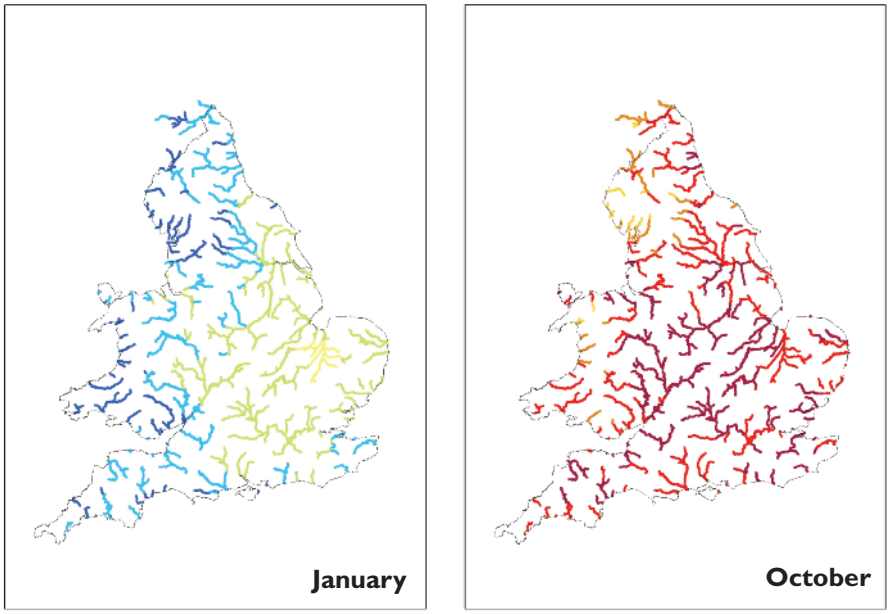
- Since 1997 there have been at least 50 severe weather events, including heatwaves, floods and heavy snow in Kent. A study of just some impacts on public services from these events estimates that they cost Kent communities £440 million.
- 54% of South East businesses surveyed[xvi] had experienced at least one weather event that had affected their business in the past two years.

Flooding and erosion

- The tidal and fluvial flood risk areas in the county of Kent are around 39,800 square miles[5].
- Since 2003 6,500 homes have been protected from river flood risk. However around 63,000 homes (10%) in Kent (excluding Medway) are at some level of risk from flooding (although in some places this risk is low).
- The annual sea level rise in Southern England is about 6mm, of which 4.5mm is attributed to climate change.
- With changing climatic conditions river flows are predicted to alter dramatically. For instance the figure below shows that by 2050 rivers in Kent are predicted to have increased river flow in winter and reduced flow in summer, by up to 80% on some rivers.

[5] Excluding Medway

Percentage change in mean naturalised monthly river flows by 2050 [xvii].
(Environment Agency 2009)



Biodiversity

- A major modelling study has shown that Kent's habitats are not sufficiently connected at present to allow some species to adapt to climate change[xviii].

Objectives

In order to deliver our 20 year vision the Kent Partnership will need to ensure that everyone in the county can, and does, play a role in tackling climate change, from reducing their own emissions to planning for adaptation. Other Kent Strategies will be vital in achieving this, especially Integrated Transport, Housing, and the Regeneration Framework. We will work to:

- Support Kent residents and businesses to reduce their energy consumption and to benefit from a high quality 'local lifestyle'.
- Increase the opportunities for renewable energy generation.
- Provide information to enable services, businesses and individuals to make decisions that are resilient in the face of a changing climate and help them prepare their operations.
- Improve the quality of our natural environment and enable opportunities for wildlife to adapt to climate change.
- Create the conditions to encourage a move to a low carbon economy in Kent and grow the markets for environmental products and services.

Low carbon opportunities for growth

Already, 17,500 people are employed in the low carbon goods and services sector in Kent – which is set to grow rapidly over the next few years.

We have significant potential in the development of offshore wind and low-carbon power generation. Also the increasing direction of regulation and changing consumer demand mean that other parts of the economy will also need to reduce carbon emissions. As part of an increased focus on the key sectors of Kent's economy we are developing a greater understanding of the county's opportunities for low carbon growth so that we can maximise growth in the areas with the greatest potential.

Action

Lord Stern's review for government suggested that we need to invest up to 2% of GDP (Gross Domestic Product) to achieve a rapid transition to a low carbon economy. Kent's own investment in transition will need to focus on the largest sources of carbon emission – transport and housing – and will be set out in our Integrated Transport Strategy, Housing Strategy and Regeneration Framework.

There is a great deal of activity happening across Kent to support sustainable living. We want to see this variety of projects continue to flourish. However the Kent Partnership wish to identify three or four priorities on which we can focus in the next three years in order to take our first big step towards reaching our 20 year vision. By 2012 we will have delivered these and would want to identify a new set of priorities to continue our journey.

We have attempted to very roughly categorise cost and impact of each of the potential priorities as high, medium or low, relative to the other priorities. However, these are just indicative estimates as we do not have cost / benefit analyses for these potential actions as yet.

Potential priorities for Rising to the Climate Change Challenge are:

Increase the generation of renewable energy at community and micro-level	
The UK Renewable Energy Strategy sets an ambition for the UK to generate 30% of electricity and 12% of heat to be from renewable sources by 2020. The value for money of small and medium scale energy generation technologies will be enhanced when government introduce a planned Feed In Tariff by which community and micro generation projects can sell energy to the National Grid. This is also a great opportunity to reinvigorate our woodlands by managing them for both biomass and wildlife.	
We could build consensus in a way that planning policies should deal with renewable energy generation in Kent. There is already a move to roll out a 10% target for new build but there is potential to be more ambitious.	**Cost: low** **Impact: high**
Stimulate green technology and services markets in Kent.	
We could commit public procurement plans to buying green technology, particularly to upgrade the energy efficiency of public buildings. By writing long term procurement plans for environmental technologies that do not exist yet we could encourage companies to invest in new research and development and decide, by focussed trials, which technologies to back. Alongside this we could build the capacity of Kent businesses to respond to green public procurement.	**Cost: medium** **Impact: high**
We could fund training opportunities for a workforce that can work in the green technology sector, for example, sustainable builders, wind turbine engineers.	**Cost: high** **Impact: medium**

Substantially reducing carbon in the public sector	
We could develop a methodology to set carbon budgets for public sector projects. We could do this by identifying an approximate carbon emission calculation for new projects. This would ensure that emissions are reduced to the lowest possible level and offset elsewhere within Kent, when zero emissions are not possible.	**Cost: high** **Impact: high**
Reduce domestic carbon emissions and reduce fuel poverty	
The energy we use for heating, lighting and power in homes produces over 25% of the nation's carbon dioxide emissions, but a typical household wastes a third of the energy it pays for. Many low-income households spend at least 10 per cent of their income on fuel and this is expected to rise substantially as fuel prices increase. The Government is providing a range of support for individuals, communities and businesses, including a major programme of financial help for home insulation and energy efficiency.	
We could retrofit 100,000 homes with smart meters and energy saving systems.	**Cost: high** **Impact: high**
Increase public understanding of climate change and the action they can take	
We could build on the government's 'Act on CO2' information campaign to market a vision to the public for low carbon lifestyles in Kent, with clear information about opportunities that will be available to them.	**Cost: high** **Impact: likely to be low?**
We could provide businesses with scenarios for how climate change could impact their operations and give them ideas on how they can prepare for the risks. Increase the number of households and businesses' awareness of action in the event of a flood to 90% in 3 years.	**Cost: medium** **Impact: ?**

We could help communities vision what their own community will be like in 2040. A particular focus for this could be coastal communities who may benefit from addressing their concerns about preparedness for sea level rise.	**Cost: medium** **Impact: low**
Ensure the risks to public services posed by climate change are understood and planned for. We committed in our Local Area Agreement to developing Local Climate Impact Profiles (LCLIPs) which assess the risks arising from Met Office climate projections. We will ensure the information arising from this is integrated widely into decision making	
Once we have these profiles we could ensure that action plans are in place and funded to deal with all the highest priority risks. Preparedness for flooding, including coastal, seems likely to be a candidate.	**Cost: unknown at this stage** **Impact: high impact projects should be selected**
Increase the resilience of habitats and species in Kent to climate change	
The impact of climate change on biodiversity is already being witnessed across Europe and, in the future, these impacts will lead to further changes in species distribution and habitat composition across large areas. Connected ecological networks will play a key part in helping wildlife adapt. This requires the projection, enhancement and connection of existing good quality habitat and safeguarding areas for strategic habitat creation.	**Cost: low** **Impact: high**
We could ensure all spatial plans include habitat opportunity mapping (see actions in chapter 4).	**Cost: high** **Impact: high**

We could ensure future agri-environment funding is focussed on habitat connectivity. We could ensure that habitats lost due to climatic changes are recreated in alternative locations. Coastal habitats and adjoining freshwater habitat need particular attention.	
Reduce business travel miles and associated carbon dioxide emissions	
	Cost: low – high **Impact: low – high**
We could encourage smart working across the public sector in Kent by encouraging more home working, using IT to reduce the need to travel for meetings, supporting staff to use public transport and facilitating flexible working in different public authority offices so staff can work in different locations. We could exchange experience between public and private sector.	**Cost: low** **Impact: medium**
We could use the power of public sector procurement to encourage the take up of hydrogen hybrid cars across Kent.	**Cost: medium** **Impact: medium**

Consultation questions:

6. Do you agree with the 20 year vision?
7. Do you think the target is too ambitious / not ambitious enough?
8. Do you agree with the objectives?
9. From the list above which three actions do you think will make the most significant contribution towards delivering the objectives?
10. Do you have any additional priorities, not included in this consultation, to suggest to the Kent Partnership? What do you estimate would be their cost and Kent-wide impact?

Value from our Natural and Living Environments

Vision for 2030

A Kent where our environment enhances our economy and quality of life and environmental services provide value for money solutions to economic and social aspirations. A place where all our natural, geological, historical and cultural heritage is protected, enhanced and celebrated. Where we live, work and play in attractive, clean, healthy and enjoyable places.

Target

Halt the decline in biodiversity by 2015 (having failed to do this by 2010!!).
% increase in people using greenspace as part of their weekly exercise by 2015.
% increase in the number of landscape character areas in the county that are in a favourable condition

Rationale

The environmental and cultural assets of Kent are of enviable quality and variety from iconic buildings, to Downs and Weald shaped by land managers over millennia, to globally important marine and coastal habitats, to town and country parks, to an extensive rights of way network.

These, like our built assets, are vital to our health and prosperity as a county and as individuals. Fundamentally they provide the services that are essential to life but their influence is even more expansive than that. They provide benefits that enhance economic performance and offer new opportunities for investment and employment. A report by CABE (Commission for Architecture and the Built Environment) found that houses located near a high quality park could command a sale value from 7% to 19% more than homes in surrounding areas[xix]. Our environment also provides services for education, leisure and health. For instance a study in the Lancet found that populations that are exposed to the greenest environments also have lowest levels of health inequality related to income deprivation[xx].

In addition the natural environment and our cultural and built heritage give us our sense of place and identity, which is increasingly important in a constantly changing and expanding world. Providing this green infrastructure, in towns and countryside, and helping

communities, particularly children, to connect with this and their local heritage is an essential part of improving quality of life. These benefits are seen most noticeably in disadvantaged communities; in fact UNICEF's report on children's wellbeing in industrialised countries finds no obvious relationship between levels of child wellbeing and national GDP per capita[xxi]. The evidence set out suggests that children's experiences are intimately bound up with their environments – their homes, their streets, the air they breathe, their landscapes.

It is not reasonable to simply assume that a healthy, well functioning natural environment and well kept historic assets will always be there to serve us. Understanding the practical economic contribution of the natural and cultural environment, as well as valuing it for its own sake, will help us make better informed choices for us and future generations.

Ecosystem services

Defined as services provided by the natural environment that benefit people. Considering ecosystem services should be part of any balanced economic approach.

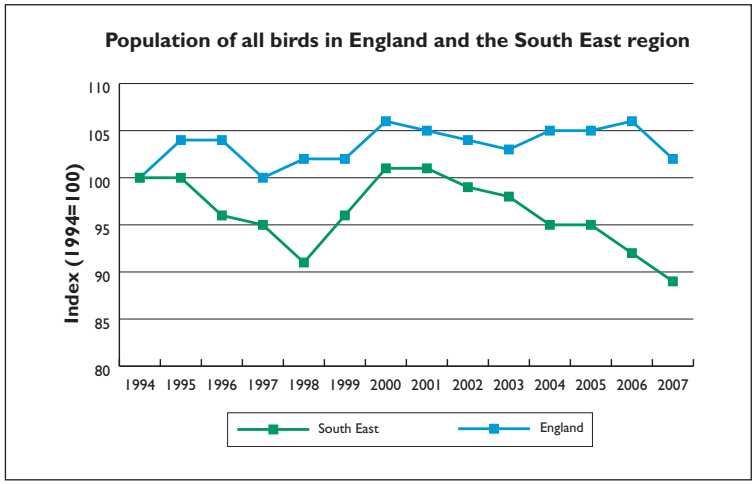
Some ecosystem services are well known including food, fibre and fuel provision and the cultural services that provide tourism revenue and physical and mental health benefits to people through recreation and appreciation of nature and culture.

Other services provided by ecosystems are not so well known. These include the regulation of the climate, the purification of air and water, flood protection, crop pollination, soil formation and nutrient cycling. These services are not generally considered by decision makers at present and represent an area where a greater understanding and focus would be very useful.

Kent Facts

Landscape and biodiversity

- Nearly one third of the county's area is projected by AONB (Areas of Outstanding Natural Beauty) status.
- 8.5% of the county area is SSSI (Sites of Special Scientific Interest), 75% of which is now in favourable condition (53.6% in 2004)[xxii].
- Our coastline is 326 miles long and extremely varied geologically and biologically.
- Kent has a very large area and great variety of nationally and internationally important habitat, for instance 40% of the UK's coastal vegetated shingle is at Dungeness and 11% of England's ancient semi-natural woodland is within our borders.
- Kent has 28 UK Biodiversity Action Plan priority habitats.
- Wild bird populations continue to decline and 1,300 of our plant and animal species in Kent are still rare and threatened[xxiii].



- The quality and health of biodiversity in Kent is important to many of its residents. For instance the Kent Wildlife Trust has over 30,000 members, around 800 active volunteers and sees up to 10,000 children a year through its visitor centres.

Tourism and Leisure

- Tourism is worth over £2.5 billion to the county economy.
- 7.2% of all employees in Kent are employed in the tourism industry.
- Visitor attractions include an estimated 18,300 hectares of accessible natural greenspace[xxiv] and 4,200 miles of public rights of way.

- Kent County Council's country parks host around 1.4 million annual visits. They are a particularly valuable resource for disabled residents with around 13% of visits from people with disabilities.

Heritage

- Kent has 18,000 listed buildings (Sandwich has a greater density of listed buildings than any town in England).
- Canterbury is home to a UNESCO (United Nations Educational, Scientific and Cultural Organisation) world heritage site.

Health

- Circulatory diseases are the most common cause of death for Kent residents (34.4%) It is related, among other factors, to physical inactivity which affects about 60% of the UK population[xxv].
- Academic evidence finds that even small amounts of green space are shown to facilitate relaxation and recovery from mental fatigue and stress[xxvi].

Children and Education

- Where children can play outside, both parents and children have more friends[xxvii], and children's play is more vigorous outdoors than indoors which has been demonstrated to improve a child's fitness, co-ordination and agility[xxviii].
- A US study found that schools that have used the environment as an integrating context for learning enjoyed significant improvements in reading, maths, science and social studies[xxix] scores.

Objectives

In order to deliver our 20 year vision the Kent Partnership will need to:

- First and foremost, support existing partnerships and programmes working to add to Kent's distinctiveness by protecting and enhancing our existing cultural, recreational and natural heritage.
- Engage people, communities and schools to help them use, understand and take responsibility for their local green spaces and natural and heritage resources.
- Improve the places where some of Kent's most deprived communities are situated by working on urban and urban fringe green infrastructure and heritage.
- Focus on wildlife by improving habitat connectivity and develop multifunctional spaces that are appropriate in scale, location and management, to meet the needs of wildlife and people.
- Provide the information to place environmental solutions at the heart of business cases for economic and social programmes.

Action

There is a great deal of activity happening across Kent to enhance our living and natural environments and engage local people in their management. We want to see this variety of projects continue to flourish. However the Kent Partnership wish to identify three or

four priorities on which we can focus in the next three years in order to take our first big step towards reaching our 20 year vision. By 2012 we will have delivered these and would want to identify a new set of priorities to continue our journey.

We have attempted to very roughly categorise cost and impact of each of the potential priorities as high, medium or low, relative to the other priorities. However, these are just indicative estimates as we do not have cost / benefit analyses for these potential actions as yet.

Potential priorities for action on Valuing our Natural and Living Environments are:

Make Kent green space brilliant	
The public authorities, utility companies and non-governmental organisations in Kent own a wide range of sites and have to fulfil a legal duty of regard for biodiversity[xxx]. We could manage public land for optimum benefit and seek opportunities to improve the physical connectivity of sites in order to create a network for wildlife and people.	**Cost: low** **Impact: high**
Ensure Kent residents have adequate access to green space	
Local planning authorities are required by PPG17 and the South East Plan to provide green infrastructure. It is also an essential component of planning for climate change. Government's 'World Class Places' Plan (2006) states that "we have to do much more to boost the urban green and blue infrastructure that can play a vital role in bringing down temperatures, promoting biodiversity and preventing flooding". However delivering green space through the planning process remains challenging. If we tackle the barriers to delivery we could enhance the health of residents and deliver Kent Biodiversity Action Plan targets as well as increasing opportunities for tourism and providing attractive localities for businesses.	

We could map out a Kent wide spatial analysis of green and heritage infrastructure need and opportunity by pulling together district plans, biodiversity action plans, biodiversity opportunity areas and evidence from, BRANCH[6], Living Landcapes[xxxi], Kent Habitat Survey and other key sources.	**Cost: medium** **Impact: high**
We could support this map with a feasibility study looking at the costs and benefits and identifying any barriers to implementation.	**Cost: low** **Impact: high**
Improve the potential for leisure activity in the countryside and enhance opportunities for the tourism industry	
We could develop multi user routes in all three Kent river valleys	**Cost: high** **Impact: medium**
Improve the health, and resilience to climate change, of threatened habitats	
Kent is recognised by the South East Plan as an area of strategic opportunity for contributing to regional biodiversity improvement targets of calcareous grassland, coastal and floodplain grazing marsh, woodland (including ancient), rivers, intertidal habitats and shingle habitats.	
We could establish a Kent wide habitat connectivity project. Chalk grassland may be a good first candidate for this approach as 2.5% of the world's stock is found in Kent.	**Cost: high** **Impact: high**

[6] BRANCH: **B**iodiversity **R**equires **A**daptation in **N**orthwest Europe under a **CH**anging climate.

Improve our understanding of the value for money provided by protecting and enhancing our ecosystems	
We could develop an economic tool that quantifies the financial benefits of environmental design for public health, education and other social needs so that decision makers in Kent have the tools to gain benefits from and for our natural and cultural heritage.	**Cost: medium** **Impact: high**
Improve our understanding of our effect on Kent's landscape	
We could update the Landscape Character condition assessment.	**Cost: high** **Impact:medium**
Use access to natural environments to improve public health	
The cost of physical inactivity to the economy is calculated to be £8.2 billion per year. If a group of 120 healthy individuals aged over 60 years become active, then over 10 years (compared to an inactive group) there will be about 20 fewer deaths, seven less heart attacks, three less strokes, two less new diabetics, and 13 less people with osteoarthritis of the knee becoming disabled[xxxii]. As recreational walking is one of the few activities that is increasing, this is a suitable activity to use to increase physical activity levels. In addition there are a number of studies that show the natural environment and local scenery is consistently important in increasing physical activity levels in communities[xxxiii], [xxxiv], [xxxv].	
As the key resource to accessing and enjoying the countryside, the public rights of way network, should continue to improve and provide inclusive opportunities for access.	**Cost: low** **Impact: high**
We could establish 13 open air gyms (one per district and Medway).	**Cost: medium** **Impact: medium**

Use the environment as a resource to increase educational attainment	
Exploring real issues in real outside the classroom helps to make learning relevant to young peoples' lives. The Learning Outside the Classroom Manifesto launched in 2006 acknowledges that these can be the most memorable and motivating experiences of a child's school career. A US study examined schools that have used the environment as an integrating context for learning. They found that schools enjoyed improvements in reading, maths, science and social studies[xxxvi]. We could establish 13 'open air / Forest schools'	**Cost: medium** **Impact: medium**
Improve residents' connection with their local heritage	
Encourage people to go out and record wildlife and built heritage – this will assist with our understanding of the effects of a changing climate and also provide social benefits for people having contact with our cultural and natural heritage.	**Cost: low** **Impact: low**

Consultation questions:

11. Do you agree with the 20 year vision?
12. Are the targets measuring the right thing? What would be an ambitious but achievable level to set the targets at?
13. Do you agree with the objectives?
14. From the list above which three actions do you think will make the most significant contribution towards delivering the objectives?
15 Do you have any additional priorities, not included in this consultation, to suggest to the Kent Partnership? What do you estimate would be their cost and Kent-wide impact?

Annex

Connections with other Kent strategies, plans and policies

Kent Partnership	
Farrells Kent Spatial Vision Vision for Kent and Kent Agreement 2	District / Unitary Community Strategies
	Integrated Transport Strategy
	Kent Environment Strategy
	Economic Regeneration Framework (draft)
	Strategy for Later Life
	What Price Growth 2
	Housing Strategy
	Leisure, Culture and Sport Strategy
	Skills Commission
Town and Country Planning	
South East Regional Spatial Strategy	Local Development Frameworks
Kent County Council	
Supporting Kent's People	
Supporting Kent Business	
A Strategy for Public Health in Kent	
Kent Children and Young Peoples Plan	
Building Schools for the Future	
Land Use Planning	
High Weald AONB Management Plan	
North Downs AONB Management Plan	
Integrated Coastal Action Plan	
Other	
Kent Biodiversity Action Plan	
Kent Countryside Access Improvement Plan	
Country Parks Strategy	
District Green and Blue Infrastructure Strategies	

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