

Climate Local Kent – One Year On

Progress Report 2013



warm homes

Save energy, save money



Foreword

by David Brazier

In September 2012, I was pleased to attend the launch of Climate Local Kent. This marked the commitment of all Kent public sector partners to the delivery of the Kent Environment Strategy by setting twelve challenging targets and one year on, a lot has been achieved.

This report demonstrates a selection of the projects and progress we have already made and includes providing 150 free home energy assessments, advice on how to access £12m of funding through the Energy Companies Obligation (ECO) fund to save up to £490 per household, helping 2,500 residents save a total of £255,000 on their home energy bills through switching their energy supplier, delivering over £1m lifetime energy savings by upgrading some of our street lighting to low energy lamps, working with 166 small and medium businesses to achieve average annual savings of over £2,000 per business and investing in new sea defences to protect 1750 homes and reduce the risk of coastal flooding.

Climate Local is a Local Governmental Association initiative to drive, inspire and support council action on a changing climate. The initiative supports councils' efforts to reduce carbon emissions and to improve their resilience to the effects of our changing climate and extreme weather.

Kent County Council and our public sector partners have committed to supporting the scheme to help local people and businesses to be smarter about their energy use and to prepare for climate impacts. It will also help to deliver public services that are resource efficient, less carbon intensive, resilient and to protect those who are most vulnerable to climate impacts and to make sure that our own buildings and operations are resource efficient, use clean energy, and are well prepared for the impacts of a changing climate.

I am particularly proud to see these commitments are being delivered, despite the challenging financial climate on public sector resources. It is clear to me that we have taken initiative to be leaders, have been innovative in our approach and have succeeded in maximising investment through successful bids for European funding and government grants.

The successes showcased in this report demonstrate that we are achieving the aims of Bold Steps for Kent by delivering value for money, helping the Kent economy grow, tackling disadvantage and putting the citizen in control. We are also protecting Kent's heritage and natural environment for the benefit and enjoyment of future generations.

The people who make this happen should be congratulated on their inspirational commitment in delivering the strategy and targets. I look forward to seeing more of these projects and initiatives in future, which will continue to show that Kent is leading the way in maximising opportunities and developing resilience in a changing climate.



Champions for Kent's Environment

Andrew Bowles, leader of Swale Borough Council and a Kent County Council member is passionate about Kent's environment. 'The environment is a fundamental part Kent's infrastructure and economy. It is essential that we work together across Kent to protect and enhance our natural and historic assets, support businesses to become more competitive and make the most of new opportunities and help residents save money'.

This passion has led him to set up and chair the Kent Environment Champions Group, designed to champion the environment and hold those responsible for delivering the Kent Environment Strategy to account. The groups' role is to:

- challenge progress towards delivery of the Kent Environment Strategy
- continually look beyond the Kent Environment Strategy identifying gaps and opportunities
- make sure the environment is considered at the highest level of decision making
- create links to the business and community sectors
- celebrate environmental success

The members of the Kent Environment Champions Group are:

Owen Baldock, Cabinet Member for Environmental Services at Tonbridge and Malling Borough Council; Paul Crick Director of Planning and Environment at Kent County Council; Graham Harris Managing Director at Dartford Borough Council; Caroline Jessel lead for Sustainability and Health, South of England NHS England; Andrew Pearce Area Manager for Kent and South London Environment Agency; Pete Raine Director of Regeneration at Swale Borough Council; James Seymour Area Manager for Natural England and Sir Robert Worcester KBE DL, Founder of MORI.

1. Saving money, delivering innovation

The Kent public sector is continuing to reduce the utility costs and minimising the environmental impacts of running their estates. Investing in energy and water efficiency, renewable energy solutions and transforming the way services are delivered is delivering cost savings through sustainable investment. Communities are also benefitting through projects which are delivering energy efficient measures to reduce money spent on home energy bills and help lift people out of fuel poverty.

For some householders this work is completed for free, taking advantage of government funded initiatives such as Kent's ECO Warm Homes.

Climate Local target We will work towards retrofitting of homes across Kent, beginning with 1,000 households in 2013, through the work of the Kent and Medway Green Deal Partnership: 1,200 homes targeted in the pilot areas, extending this across Kent to help 5000 households by 2015

The Kent and Medway Green Deal Partnership – addressing fuel poverty in Kent

£3billion is wasted in energy every year across UK homes and in Kent alone, over 308,000 homes are inadequately insulated meaning they are losing money and are not energy efficient. This problem has become increasingly apparent with the economic slowdown with an estimated 11.4% of Kent's residents living in fuel poverty- that's almost 80,000 households spending more than 10% of their income on heating.

The Energy Company Obligation (ECO) is a scheme that is funded by the large energy companies to install energy efficiency measures into homes including insulation, draught proofing and new boilers. The Kent and Medway Green Deal Partnership is a partnership of local authorities, registered housing providers and other interested groups who work with an ECO funding provider to deliver a project called ECO Warm Homes. This project aims to provide the free energy efficient measures to eligible properties and focuses on helping vulnerable people and those who struggle to pay their fuel bills.

Since May 2013, the Kent and Medway Green Deal Partnership working with Enterprise Utility Services, (the appointed ECO provider) have been targeting 1,200 homes in pilot areas in Dartford and Gravesham, Swale, Medway, Dover and Thanet. ECO Warm Homes is expected to roll out across Kent from October 2013 with the potential to help 5,000 households to save money on energy bills by March 2015. This project is providing access to £12m of funding which could save households up to £490 per year.

People living in certain areas or claiming certain benefits are eligible for a free home assessment in addition to free energy saving measures. To find out about eligibility call 0800 521 660 or complete the form at www.Kent.gov.uk/warmhomes

In addition, Kent was successful in securing £100,000 of Green Deal pioneer funding from the Department of Energy and Climate Change. This has provided 150 Kent residents free home energy efficiency assessments to see how they could take advantage of Green Deal financing. Using these funds, four homes have also been fully refitted with several energy saving measures to become demonstration homes.

To ensure local businesses can also take advantage of Green Deal and ECO, by becoming an approved installer, three Green Deal workshops have been delivered. A 'Meet the Buyer' event was also held where 70 businesses were introduced to the ECO funder Enterprise Utility Services.

5,000 households will benefit from ECO measures installed by local businesses



Kent householders saving on fuel bills

Kent's first Collective Switching Scheme, Energy Deal, was launched in April 2013 as a partnership between Tunbridge Wells, Dover, Dartford and Gravesham Councils. Collective switching aims to provide support to households looking to reduce gas and electricity bills by combining purchasing power to give residents better deals on their home energy.

Over the course of six weeks the scheme engaged with almost 2,500 residents in the pilot areas, offering average savings of £102 per year for those on a dual-fuel tariff. Participants were able to access this offer online, over the phone or in person and receive their offer via post or e-mail. 70% of all participants had not switched their supplier in the last 3 years. A further campaign is being considered for winter 2013/14.



Sustainable Sheppey

Sustainable Sheppey is 3-year community led project to support the community of the Isle of Sheppey to make greener choices, use resources more effectively, prepare for a changing climate and develop new skills. Just over £946,000 of funding was awarded, mainly through the Big Lottery's Community Living Sustainably Fund. The partners include Swale Borough Council (lead), Kent County Council, Amicus Horizon, Sheppey Matters, Groundwork UK, Work This Way, HMP Stanford Hill, Southern Water and Eastchurch Village Hall.

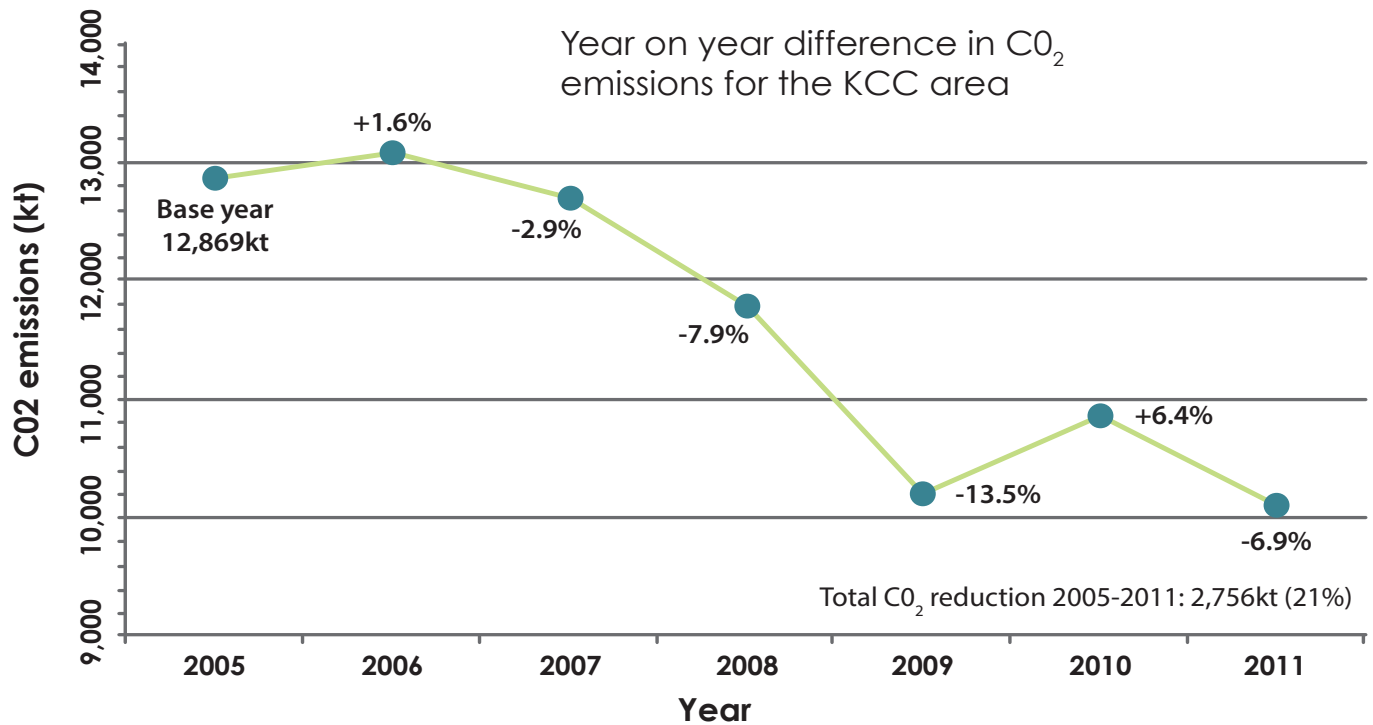
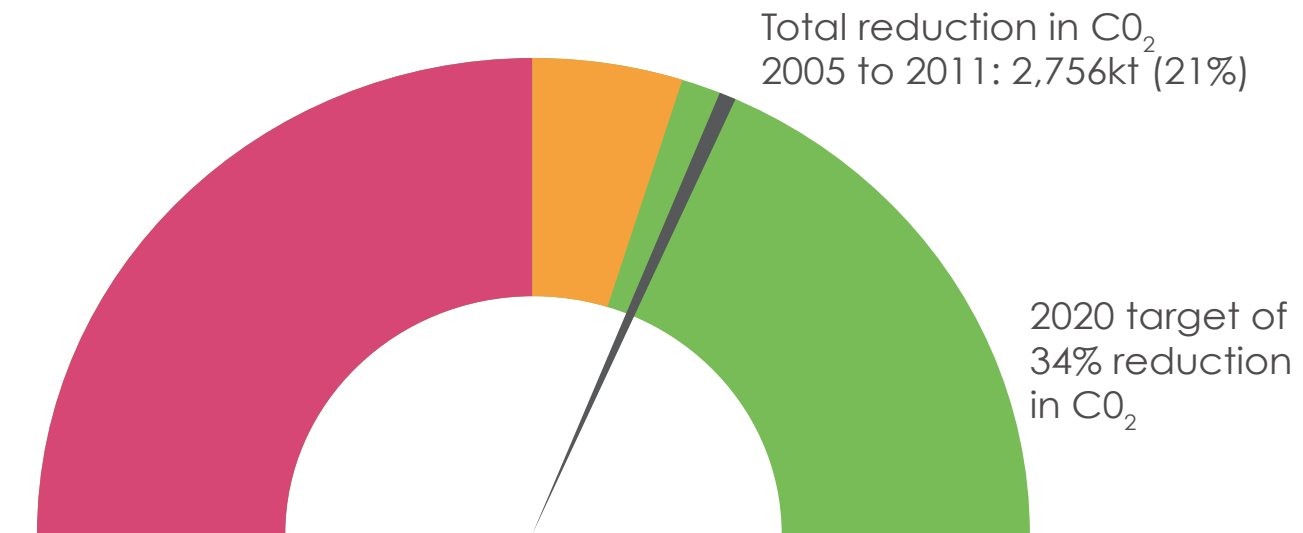
Projects include HMP Stanford Hill converting the prison's waste cooking oil into bio-fuel to use in the prison and sell to local businesses. Community volunteers have been trained to become Green Doctors and visit vulnerable people and advise them on how to make their homes more energy efficient. It's estimated that 1,900 households will save up to one tonne of carbon dioxide per year and make significant reductions to their utility bills.

By investing in a community renewable energy scheme, it is expected that residents will have their energy requirements met more reliably and at a reduced cost. This could also have the potential for a stream of income to be generated to support future local projects.



Climate Local target Delivering a 34% reduction in carbon dioxide emissions by 2020: Up to 2011¹, carbon dioxide emissions showed a 6.9% decrease from 2010 levels, a reduction of 747kt of carbon dioxide. Overall reductions year on year have met or exceeded the target 2.6% reductions.

The figure below displays progress within the KCC area towards the overall 2020 target to reduce carbon dioxide emissions by 34%, based on 2005 baseline.



¹CO₂ emissions estimates are based on DECC local authority statistics, which have a two year delay on reported data.

Climate Local target Deliver a 10% increase in energy from renewable sources by 2020: The total number of Kent renewable energy installations registered through the government's Feed-in-Tariff during 2012-13 is 3,330 with a total installed capacity of 14.58 MW. The majority were solar photovoltaic at 3,221 with Gravesham district having the highest, at 568 installations.

Energy efficient buildings

Kent County Council has replaced hundreds of fluorescent tubes with low-energy LED lighting at its County Hall offices. This has reduced on-site electricity consumption by 18% and is expected to generate an estimated £690,000 of lifetime cost savings from an investment of £170,000. Since 2005, KCC has invested £3m in energy efficiency and renewable energy projects with estimated lifetime savings of over £7m.

Ashford Borough Council installed 180 solar photovoltaic (PV) panels on the Civic Centre roof in early 2012. While the panels had been projected to generate around 35,000 kWh of energy over the year, they performed around 17% better than expected and generated around 42,000 kWh. This is generating almost 5% of electricity demand and saving £4,000 a year in electricity costs. The Council also installed solar PV panels on 64 residential properties, helping residents reduce their energy bills. Both projects are providing an estimated £18,500 of income from the government's feed in tariff to the council. (Photos Ashford solar 1 and 2)



KCC also installed three solar PV arrays on three of its buildings in 2012: Invicta House at County Hall, Maidstone, the Highways depot in Ashford and Broadmeadow Residential Care Home in Folkestone. £128,000 was invested in total with the system being profitable from day one. The council expects to achieve at least £250,000 in profit over the lifetime of the panels and this also contributes to reducing the council's carbon emissions. The Invicta House installation was also the first full black solar array installed in the UK. This was selected specifically to minimise the visual impact of the large installation, which is situated close to Sessions House which is a listed building.

KCC's energy saving effort extends beyond council properties, with the first phase of upgrades to street lighting, signs and bollards across the county to new, low energy LED lighting at a cost of £240,000. This investment is expected to save over £1 million over the course of the product lifetime, helping to reduce the £5.8m annual bill to light our streets. The success of this early initiative will lead to all streetlight lamps being upgraded over the next few years. Combined with plans for part night lighting, dimming and removal of some lighting columns, several million pounds are expected to be saved annually.

Olympic quality water at Kingsmead swimming pool

Kingsmead Leisure Centre in Canterbury have improved the pool water quality by rebuilding the bathing water circuit for the swimming pool, which included replacing older equipment and installing new water filters. Over the next 25 years the new filters are expected to save around £845,000 through reductions in chemical, energy and water use.

The new filters are the same specification as those used at the swimming pool for the London 2012 Olympic Games.

Transport accounts for one third of carbon emissions in Kent.

Driving fewer miles saves money

For the fifth consecutive year, KCC has reduced business miles travelled by staff. In 2012/13, council staff travelled 1.3 million fewer miles than the previous year, saving £227,000.

This saving has been achieved through teleconferencing replacing over 4,500 face to face meetings, transforming services and planning journeys more effectively so staff don't need to travel as much.

Pay-as-you-go cars

KCC continues to provide access to low emission vehicles for work through the national ZipCar scheme. In 2012, Maidstone Borough Council also joined the scheme, which operates three cars across two locations in Maidstone town centre. Council employees can avoid bringing their own car to work and this helps reduce emissions from vehicle use in Kent. KCC employees travelled 27,281 miles in Zipcars in 2012/13.

This scheme also benefits the local community with 230 Kent residents using the scheme, providing access to a fully insured and maintained car, and helping residents avoid the full costs of car ownership. Typical annual savings are £3,000 per car. The scheme is available from as little as £5 per hour with 40 miles of fuel included. Join now at www.zipcar.co.uk

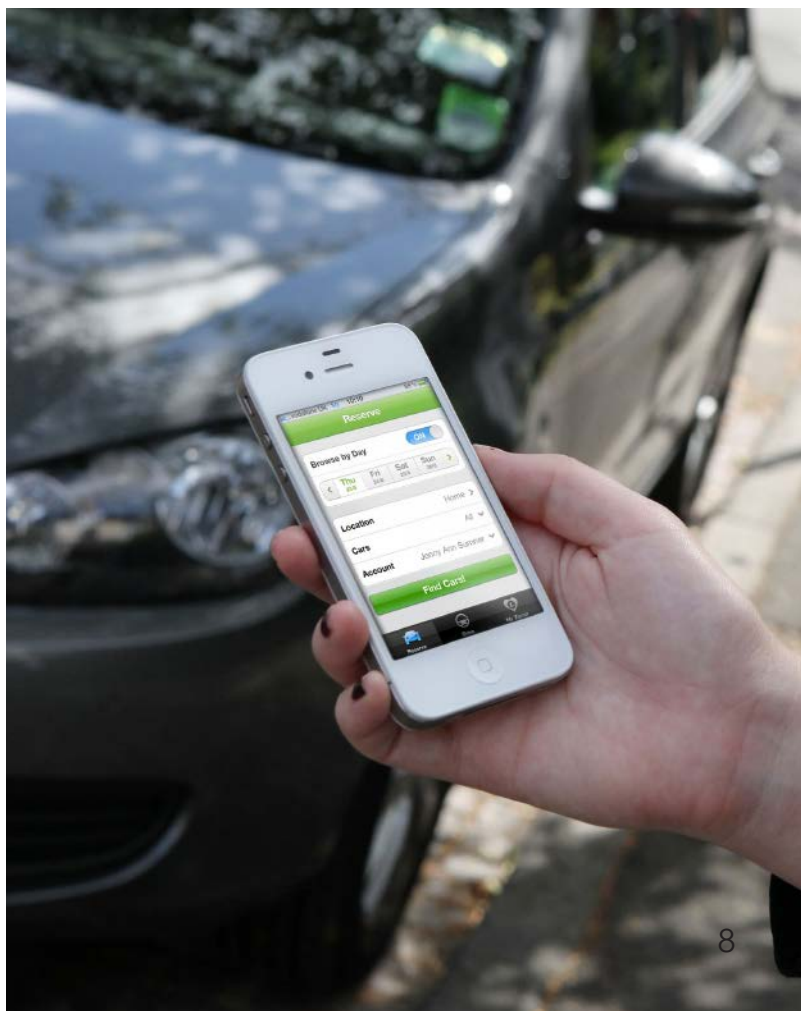
Eco Schools – walk the talk

The international Eco schools awards programme is still popular with Kent schools providing a framework for embedding sustainability into the heart of school life. Over 350 schools in Kent have earned an award, 71 of which achieved Green Flag status. Three Green Flag schools - St Margaret Clitherow Catholic Primary School, Tonbridge, Broomhill Bank School Tunbridge Wells and Briary Primary School Herne Bay also achieved the coveted Energy Award that demonstrates a school has significantly reduced its carbon emissions year on year.

KCC travel planners work with schools to help reduce the impact of school related travel through the development of school travel plans and in partnership with the KM Newspaper Group who promote walking bus schemes, Walk on Wednesday (WoW), Active Bug and Green Footsteps. More than 150 schools take part in these schemes and on challenge day, classes with the highest number of walkers are named winners and receive certificates and Leeds Castle vouchers.

Pool cars saving money, reducing emissions

In 2011, the Kent Fire and Rescue Service completed a Light Fleet Review (vehicles under 7.5 tonnes) which highlighted a number of proposals to reduce costs, drive down mileage and improve vehicle practices. One of these proposals was to eradicate travel using staffs own vehicles (grey fleet) and confine all mileage to service owned vehicles. Grey fleet mileage by its own nature is very difficult to control and by using a managed pool vehicle scheme we expect to see a reduction in



unnecessary journeys and miles travelled. We are still in the early stages of implementing this across Kent and Medway but as part of this scheme we endeavour to ensure that pool cars are available wherever necessary. To accommodate a pool vehicle scheme we have expanded our light fleet and all the new vehicles are fitted with stop/start technology, speed limiters and carbon efficient diesel engines.

Since 2008/09 carbon dioxide emissions and mileage has been monitored and during 2012/13 emissions fell for the first time compared to the previous year with a 12.8% reduction. In the same year, actual mileage fell by 169,368 miles equating to a reduction of 117 tonnes of carbon dioxide. This is promising early evidence that the pool car scheme is making a positive impact.

All aboard the hybrid bus

Reducing the environmental impacts of Kent public transport is big business, particularly when it comes to emissions affecting local air quality. KCC has contributed £230,000 towards a total investment of £3.3m in Arriva's new fleet of 11 hybrid buses. These brand new diesel-electric buses significantly reduce tail-pipe emissions, use a third less fuel and are quieter so reduce noise pollution.

The Transport Minister launches first diesel-electric hybrid buses in Kent



The buses are running along the number 71 London Road route from Maidstone to Larkfield and Snodland. These hybrids represent the first of their kind in Kent and will help contribute to improving local air quality.

Low emission buses improves local air quality

All district councils in Kent and Medway work together through the Kent and Medway Air Quality Partnership (K&MAQP) which seeks to improve the air we breathe, promote sustainability and benefit the health of our communities.

This partnership is targeting education – The Air We Breathe pilot smoking cessation scheme, Sustainable Transport – Low carbon vehicles, active transport and walk to school, Exposure Reduction – Use of forecasting technologies through the Kent Air alerts system.

One sustainable transport project that is making a difference is a bus retrofit scheme on a route that runs between Maidstone and Tonbridge and Malling districts.

In January 2013, Tonbridge and Malling Borough Council (TMBC) and Maidstone Borough Council (MBC), with support from Kent County Council's Highways and Transportation department, Arriva and KCC Public Health were awarded DEFRA grant funding for the fitting of emissions reducing equipment (retrofit) on up to 10 Arriva (Southern Counties) buses that run from Kings Hill to Maidstone High Street via the A20. The aim is to improve the quality of the bus service along the A20 route which passes through several pollution hotspots and will complement the new hybrid buses. A similar retrofitting scheme in London has demonstrated that hybrid buses can show a 30% reduction in carbon dioxide emissions and 21% reduction in oxides of nitrogen (NOx). This will help to improve the air we breathe and has the potential to reduce the health effects associated with air pollutants, such as asthma. This project is an example of partnership working between the public sector and business delivering sustainable solutions with direct health benefits to the local community.

Zena Cooke, Director of Regeneration and Communities at MBC said: "the close relationships between sustainability, health, air quality, climate change and economic vitality requires close partnership working in order to fully realise the co-benefits for our communities. The work we are doing with KCC Public Health, Transportation and Highways and neighbouring districts is a good example of this".

Steve Humphrey, Director of Planning, Housing and Environmental Health at TMBC said "this grant funding is a great opportunity to explore new ways of improving air quality in the borough. With road traffic predicted to increase, it is vitally important that such initiatives receive financial support, so we can assess the benefits of this new technology."

Getting personal about public transport

Personalised travel plans were distributed to 548 rail passengers at three mainline train stations, providing passengers with personalised alternative travel options to and from the station to try to reduce the reliance on the private car and tackle climate change. Posters and leaflets were also visible at each station with a footfall of over three million people (data from the Office of Rail Regulation 2011-12 reports) across the three stations. Even those who did not get a personalised travel plan received some of the messages from the promotional literature.

Having secured funding through the government's Local Sustainable Transport Fund, KCC have employed a Community Rail Engagement Officer who has been working with schools to encourage pupils to use trains. This includes promotion and practical training, for example buying tickets, reading timetables and talking through personal safety issues. Some pupils have also been taken on trips on the railway to increase their confidence. In total, the officer engaged with 600 pupils across six primary schools and one secondary school.



Hire a bike from a Kent railway station

Four railway stations in Kent now have Brompton Dock folding bicycles:

- Tonbridge
- Maidstone East
- Ashford International
- Canterbury West

Brompton Dock is a unique cycle hire scheme that offers its members 24 hour access all year round, seven days a week to use a Brompton folding bicycle. Bikes are available for both long and short-term hire from as little as £2.50 per day. To access the scheme, individuals register for membership online before hiring a bike by text message from any of the public docks.

For more information including tariffs, dock locations, how to hire a bike visit BromptonDock.co.uk

Making it easier to charge your electric vehicle

KCC co-ordinated a successful Kent public sector bid to the Department of Transport, securing £273,000 over the next two years to fund 75% of the cost of installing charging points for electric and hybrid vehicles.

This was achieved in partnership with Medway and nine of the Kent District Councils and will see 49 fast charge points (top up from empty to full in 3-4 hours) installed over the next 18 months at council managed locations. The majority will be located in off street public car parks. SussexAir (in a bid backed by KCC, Hampshire, East and West Sussex and Brighton and Hove councils) were also awarded £1.8m for the installation of 35 rapid charge points (top up from empty to full in 30 minutes) to be installed at points on the strategic road network across the South East, around 10 of which will be in Kent and Medway. These will be delivered by March 2015 at locations such as service stations and close to motorway junctions.

Savings from waste recovery

Working in partnership with six other local authorities in the South East (Brighton and Hove City Council, Medway, Hampshire, Surrey and East and West Sussex councils), KCC is leading a project to make sure that valuable waste materials are not sent to landfill. The group aim is to convert waste into useful materials/items to gain an income instead of incurring high disposal costs and landfill tax. Between now and 2020 potential savings of £310m have been identified.

The group will also work together to map current and future waste infrastructure needs to further identify possible savings and efficiencies from partnership working. The waste materials being focused on are food, plastics, textiles, wood, bulky items and Waste Electrical Electronic Equipment (WEEE). Working with waste material experts, the group can assess and build a business case to identify the potential supply and demand and create jobs.

Waste gas to construction material

The Environment Agency is working with strategic closed landfill site owners to improve how they capture and treat greenhouse gases, and focussing particularly on methane, which is a powerful greenhouse gas that is 25 times more powerful than carbon dioxide. By encouraging gas producing landfill sites to burn off methane efficiently rather than allowing it to escape to the atmosphere, the Environment Agency partners are helping to reduce localised air pollution and the impacts of climate change.

In partnership with the Environment Agency, KCC has funded a pioneering carbon capture technology on the North Farm closed landfill site near Tunbridge Wells. Carbon dioxide is captured from burned methane emitted from the landfill site. This in turn is used to treat waste products to produce a valuable aggregate material used in the construction industry. This process can capture up to 20% of the carbon dioxide produced when methane is burned in a controlled way which then reduces the impact of the landfill emissions and provides a readily marketable product at minimal environmental cost.

The trial was an effective field test of the technology and the process is now used elsewhere in the UK to manufacture aggregate for block making for construction activity. Further work may be undertaken at North Farm in due course to reduce landfill gas (LFG) emissions and increase the efficiency of landfill gas capture and treatment. KCC waste management team continue to monitor and effectively control LFG emissions on its historic closed landfills in the most efficient manner with a priority action programme developed each year.

2. Growing the economy

The low carbon sector is the most rapidly growing sector nationally rising by 33% over two years from 2008-2010 and with an estimated value to the Kent economy of £1 billion employing between 17,000 and 25,000 people².

The low carbon sector includes businesses that are either operating in a sustainable manner or are delivering green products or services. Being the gateway to Europe with excellent transport and port connections, Kent is the ideal location to attract investment from this rapidly expanding sector.

To exploit this opportunity, Kent County Council working in partnership with local councils, Locate in Kent, BSK-CIC and the University of Kent is delivering funding opportunities and SME business support to attract more innovative businesses to Kent. This will help us achieve our vision of a Low Carbon Kent and support economic growth.

² Report by Regeneris Consulting Ltd, 2012
Low Carbon Kent: Developing an Evidence Base for Opportunities in the Low Carbon Economy

TIGER

TIGER (Thames Gateway Innovation, Growth and Enterprise) is a KCC backed, interest free loan fund that offers financial assistance to businesses looking to invest in new products, processes or markets, or potentially looking to expand existing activities where they will lead to increased sustainable employment. This became accessible in March 2013.

Funded by the government's Regional Growth Fund, TIGER offers between £10,000 and £2.5 million to businesses seeking to invest in Dartford, Gravesham, Medway, Swale and Thurrock.

TIGER is aimed at projects that could not be delivered by the private sector and applicants need to demonstrate why they need TIGER support and why other forms of investment are not possible.

Potential to create over 5,000 new jobs in Kent

Expansion East Kent

Expansion East Kent aims to create 5,000 new jobs and stimulate over £300million in private investment throughout East Kent over the course of three years. A £35 million programme funded through a successful application to the government's Regional Growth Fund will afford financial support to businesses seeking to invest in East Kent in the form of 0% interest loans.

Priority businesses include scientific research and development, manufacturing, especially in the development of the supply chain to support renewable energy industry, and tourism, heritage and culture. To date, 27 companies have secured funding, although significant funding is still available to eligible candidates.

Flying Fish Hovercraft

Based in Sandwich, Flying Fish Hovercraft (FFH) makes small hovercraft for the leisure industry. They were successful in their loan application under Expansion East Kent, for a total of £156,556. Using this money, they are expanding their current business through research into new products and the generation of overseas business. Emma Pullen of FFH says that the good infrastructure and low business rates is reason enough for growing in Kent and hope to expand to 32 full time staff over the next 5 years.



Climate Local target We will work with at least 500 local companies by 2015 to help them cut their energy, waste and water bills: To date, 166 businesses have been supported with average savings of £2,065 per business.

Low Carbon Kent – supporting SME's

The Low Carbon Kent business network was successfully launched in April 2013 and has over 1,000 members. The aim of this network is to bring businesses together across Kent, supporting them to grow, create jobs and increase the Kent economy.

The network is free to join and members of the Low Carbon Kent business network benefit from services which include:

- Carbon management support,
- Environmental management support and access to the Steps to Environmental Management (STEM) scheme.
- Listing on a directory of low carbon suppliers.
- Information and support for environmental awards.
- Information on other free services offered throughout Kent, for example Expansion East Kent, TIGER fund, etc.

We have secured funding for a new project FUSION, with a total project value of €5 million through the European Union via the Interreg IV A 2 Seas programme. Delivered in Kent by Kent County Council, BSK-CIC and the University of Kent, the project is an opportunity for Kent companies interested in the environmental sector to voice how business support should be developed and to influence policies that enhance economic potential in Kent.

This funding will be used to develop new sustainable business models in Kent and support the expansion of the low carbon, environmental technologies sector. This will be achieved through developing effective policies/strategies to encourage growth in the low carbon sector and to develop and pilot targeted business support packages to enable businesses to become more environmentally sustainable. Research into the low carbon market will also identify business opportunities and threats, focusing in particular on:

- Renewable energy (wind, biomass, marine)
- Housing retrofit

- Climate change adaptation e.g. water
- Waste
- Resource efficiency (new measures, techniques, business models etc)

FUSION is expected to help stimulate the Kent economy supporting existing projects like TIGER, STEM and Expansion East Kent

Low Carbon Kent has run various events throughout the year including Green Deal information workshops, STEM Blue, Silver and Gold workshops and we are currently planning our second annual Green Business Conference in November. The conference will be a platform for our members to showcase the work they have done to reduce their impact on the environment as well as meet new business contacts.

We promote our members at various events too. For example, we invited several businesses to exhibit in the Low Carbon Kent zone at Kent 2020 and we published a supplement on retrofitting through Green Deal and ECO in the July issue of Kent Business.



Steps to Environmental Management

With European funding, KCC developed the STEM scheme which launched in 2011. As the name suggests it is a step-by-step guide to putting an environmental management system in place within a business or organisation. The scheme has three levels; Blue, Silver and Gold. The criteria in each of these levels correspond to requirements in the internationally recognised BS8555 and ISO 14001.

Since its launch, the scheme has been well received with over 450 businesses being certified. The most effective delivery of STEM has been the workshops and these have been extensively delivered across Kent. Many local authorities have taken the opportunity to run STEM workshops with

their suppliers, helping to green their supply chain and share the benefits of improved environmental management.

Businesses that operate an environmental management system to the STEM standard on average save £2,065 annually, reducing annual carbon emissions by 3.9 tonnes.

Harnessing energy from Kent's woodlands

The Kent Downs Woodfuel Pathfinder project has brought a focus to the issues and opportunities surrounding woodland management and the development of woodfuel (biomass) supply chains in Kent.

The project began in 2011 and prioritised three work areas:

- 1 Building demand for locally produced wood chip by delivering feasibility studies for buildings where there is an opportunity to displace fossil fuels
- 2 Studying woodfuel supply opportunities at a landscape scale
- 3 Promoting best practice around woodland management and woodfuels via engagement with the forestry sector.

The project provided support to a wide variety of people in over 100 locations. This included 40 detailed feasibility studies of which 20 were for KCC schools. To date the project has helped stimulate over 2 MW of installed biomass heating capacity and has studied supply opportunities in 1,400 hectares of woodland. The project was funded by the European Regional Development Fund as part of the MULTIFOR Interreg IVa 2 Seas programme. The support developed under MULTIFOR will continue to June 2015 as part of a new Interreg project entitled ADAFOR.



Case study: Cobham Hall, a large Grade I listed Jacobean house formerly home to the Earls of Darnley and now operated as an independent boarding school was keen to explore the potential for biomass (wood fuel) as a more sustainable form of heating.

The Kent Downs Woodfuel Pathfinder project, provided support focussing on the technical aspects of replacing 1.4 MW of oil boilers with a biomass heating system. The business case that was required to satisfy the school Trustees included a supply-chain study, which demonstrated the security of supply of wood chip from within a few miles of the school.

The school has recently selected a supplier and installation of the 950 kW wood chip system is about to commence.

The Kent CORE (Centre for Offshore Renewable Engineering)

The Kent CORE is one of six such areas in England identified by the government as a key location for the development of the offshore wind farm industry and its supply chain. The Kent CORE takes in the waterside development opportunities at the Isle of Grain and Sheerness otherwise known as the Medway Superhub, and the key ports of Ramsgate and Whitstable which are important centres for operation and maintenance. Early development within the CORE has focused on the latter and been strengthened this year by completion of the phase one of the London Array, currently the largest offshore wind farm in the world. Consent has also been recently granted for an extension to the Kentish Flats wind farm, one of the pioneering Round One projects.

Planning consent is in place for a turbine

manufacturing and assembly facility at Sheerness and this opportunity continues to be marketed by Locate in Kent, the County's investment promotion agency. Skills and training provision in the CORE is also being strengthened by the completion of the Environmental Technologies Centre at East Kent College and the proposed extension of the Swale Skills Centre already established as an important centre for offshore wind training. The continued development of an industry supply chain both to support existing projects and future growth remains a further priority. The Kent Wind Energy online resources have recently been refreshed (see www.kentwindenergy.co.uk) and a supply chain mapping and business database project will be completed this autumn.



3. Valuing the natural and historic environment

Kent's natural and historic environment is an asset worth protecting and it's an immense task with the county benefitting from 326 miles of coastline, 18,000 hectares of accessible green space, two Areas of Outstanding Natural Beauty and two World Heritage sites. Kent residents and visitors can take advantage of 4,200 miles of public rights of way to access all of this and more, including 440 Wildlife sites, 442 scheduled monuments and 500 conservation areas.

With 1.4 million visitors to our country parks we know that the Kent countryside is an asset valued and enjoyed by many and provides a significant contribution to the Kent economy and local employment.

Dover's Heritage Strategy

In response to the government's Heritage policy in the National Planning Policy Framework, KCC heritage conservation team were commissioned by Dover District Council and English Heritage to produce a Heritage Strategy to ensure that the iconic historical assets of Dover district continue to play a clear role in shaping future regeneration and development.

The Heritage Strategy seeks to identify and understand the many historic assets in the Dover district and how their special character could contribute to the future of the area. It also helps to establish the key objectives in the Local Development Framework whilst providing guidance for the management of historic assets.

Through public consultation, the strategy engages Parish Councils, CBLA, Protect Kent, Local heritage groups, neighbouring LPAs, local developers, local communities, schools, universities, architects and land management, planning, tourism and heritage professionals. It aims to involve developers

and communities in promoting changes to increase the value of heritage tourism while encouraging heritage led regeneration

New Kent Landscape Group

2012 saw the successful creation of the first Landscape Group for Kent, a multi-discipline group focussing wholly on landscape issues across the entire county. This project adopted a cross-boundary approach, involving planning ecology and landscape specialists from local authorities as well as landowners, NGOs and landscape archaeologists.

13 Special areas of conservation

6 Special protection areas

6 Ramsar sites (designated wetlands of international importance)

101 Sites of special scientific interest covering 8.5% of the county

The Landscape Group promises a more co-ordinated approach in decision making with a duty for local authorities to co-operate across boundaries. Spatial planning and landscaping are to benefit from the groups' creation with improved efficiency, especially with larger-scale projects.

Improving Gordon Lake in Gravesham

Gravesham Borough Council has engaged with the users of Gordon Lake to improve the area and the facilities. The project has resulted in:

- swim/lake clearance days
- informal angling taster days
- fish stock survey by the Environment Agency
- improvements to the fishing facilities working with lake users.

The ambition is for this work to continue in order to develop the lake for the use of the local community. In addition, the council working with Groundwork established a 'Team Green'. This team is made up of ten



apprentices who are unemployed young people from the local community. The team spend one day per week learning practical new skills such as brick laying as well as interview skills and CV writing. The other four days are spent carrying out environmental improvements across the borough, including works around Gordon Lake. Street cleansing performance has been maintained during 2012-13. Hot spots in the borough were identified and this led to additional litter and cigarette bins being installed in these areas. The cleansing service has been realigned so that all streets are now visited at least once every two weeks the day after refuse collection. A new parks crew has been established to carry out litter clearance at all the parks and open spaces around the borough.

Chilham to Godmersham public bridleway

Nearly 4.5km of newly created public bridleway now connects the villages of Godmersham and Chilham bypassing the busy A28 between Ashford and Canterbury. This extension to the already popular Pilgrims Cycle Trail and Great Stour Way connects the charming villages of Wye, Chartham and Chilham and offers a path through the Kent Downs Area of Outstanding Natural Beauty.

The route will form part of National Cycle Route 18 connecting Ashford and Canterbury along rural lanes and traffic-free public bridleways. Following a successful grant application made by Kent County Council to Natural England's Paths for Communities scheme, the route has been sensitively surfaced to provide a smooth route that can be enjoyed by walkers, cyclists and horse riders.

This fantastic extension has also been made possible through the generosity and assistance of local landowners who have been keen to assist the county council in providing a walking and cycling route between Ashford and Canterbury that avoids use of the main A28 trunk road.

Oyster Bay Trail Coastal Cycle Route

This new cycle route linking Reculver to Whitstable was completed in March 2013 and forms part of Regional Cycle Route 15. At its western end the route connects to the Crab and Winkle Way (National Cycle Route 1) at Whitstable railway station, which itself provides an eight mile direct cycle route link to Canterbury. In the east, the route links with the Viking Coastal Trail which provides an extension of the coastal cycle route for nine miles to Margate.

Benefits include increased connectivity, particularly with Canterbury and Whitstable railway stations and reductions in congestion and air pollution. There has also been an increase in tourism and economic benefits by attracting more people to Reculver Country Park, including visitors from the wider UK and Europe. This also provides greater access for disabled people and provides wider access to health benefits from walking and cycling in the countryside.

The total scheme cost £250,000, with £125,000 of this funded by the Sustrans Connect2 Big Lottery Fund and £125,000 by Canterbury City Council



Making it easier to Explore Kent

May 2013 saw the launch of an all-new interactive map for Explore Kent allowing users to search for walking, cycling and horse riding routes as well as detailed information about the Public Rights of Way (PROW) network in Kent. Since the launch, the map has had 23,064 unique visits.

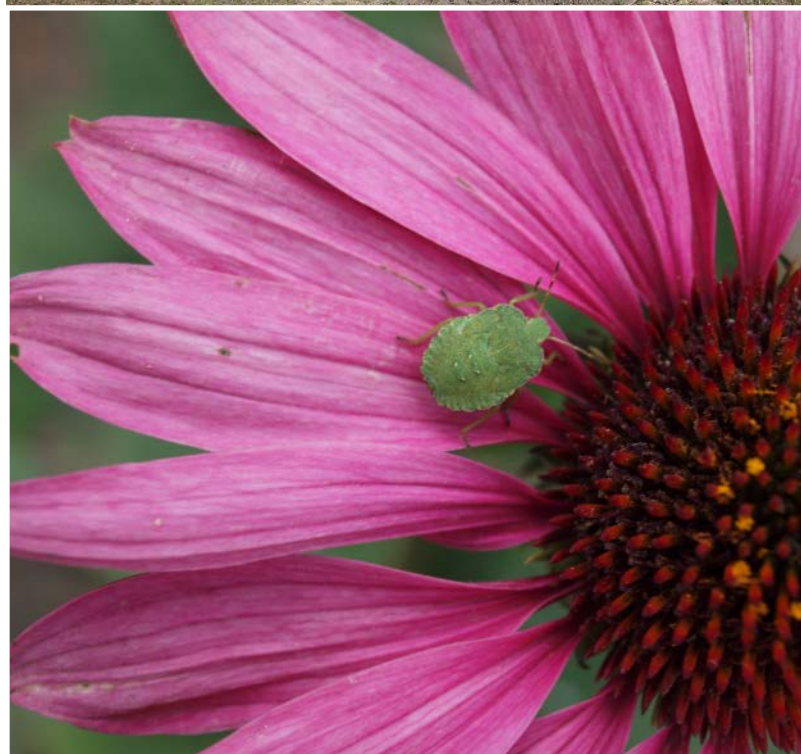
Monitoring our Natural Habitats

Assessing Regional Changes in Habitats (ARCH) was a €2.4million partnership between KCC and Nord Pas de Calais Regional Council (NPdC) funded by Interreg IVA that ended in March 2013. It sought to provide accurate information on the extent of habitats in Kent and NPdC and to explore the use of tools and techniques to enable more efficient means of habitat monitoring.

With the funding available and with assistance from Kent and Medway Biological Records Centre, Kent Wildlife Trust, Tunbridge Well District Council and financial backing from five districts and the Environment Agency, we delivered:

- habitat and land cover survey of the entire county
- habitat change analysis over 10 years
- land cover change analysis going back to the 1960s
- Habitat Connectivity Analysis tool which measures habitat fragmentation and produces models of potential habitat connectivity
- planning applications screening tool which enables rapid assessment of planning applications for their potential biodiversity impact.
- new methodology to rapidly assess the condition of local wildlife sites.

The website (www.archnature.eu/navigator.html) for the habitat and land cover data was one of the projects that we managed to make digital and geo-rectify aerial photos going back to the 1940s (provided by the RAF). We are now working with Google to post them to Google Earth.



4. Adapting to climate change

Dealing with severe weather events is something that the Kent public sector manages effectively every year.

Whether it's localised flooding, a heat wave, storm damage or a harsh winter the focus is about keeping Kent moving on the roads, delivering essential public services, keeping schools open and ensuring vulnerable people are protected.

This is delivered through our comprehensive and tested Kent emergency plans. The cost to the public sector and businesses can be significant and data recorded in 2012 shows that these costs exceeded £850,000. With future climate changes predicted, we anticipate that these events will increase in frequency and severity and it is important that we plan for and make changes now to minimise the cost and impacts to our public services.

Climate Local target We will support local communities in preparing for climate change through the development of 15 community plans for those most at risk or with greatest opportunities.



Coastal Communities 2150

Climate change presents new risks and opportunities for coastal communities in Kent. Effects that might be experienced include

hotter and drier summers, warmer and wetter winters, more frequent extreme weather, sea level rise, increased rates of coastal erosion, and higher annual ocean temperatures.

Launched in January 2011, Coastal Communities 2150 (CC2150) is a European funded project that seeks to help coastal communities understand and develop local responses to short and long-term climate change risks.

Kent County Council aims to increase community resilience to these risks and opportunities along the Kent coast. The pilot communities are in Margate and Cliftonville, Romney Marsh and on the Isle of Sheppey. An enthusiastic team has been working to engage with these communities, seeking to improve residents' knowledge of climate change and gather feedback on their concerns and where they see opportunities.

Following an extensive research and engagement development phase, the public launch of the project was held in June 2013. Displays at a number of events across the pilot areas allowed the project team to engage with residents by providing more information and collecting responses. Some of the events attended include: Lydd Club Day, Dungeness Open Day Southeast Air Show and Sheppey Summer Carnival. In addition to these events, static displays were set up in public buildings such as Thanet Gateway, Lydd and New Romney Libraries as well as in the Sheerness Gateway and the Healthy Living Centre.

A dedicated website has been set up to disseminate the project team's research, possible adaption strategies, and allow the Kent public to have their say on the issues presented. The website has received in excess of 2,600 visits since it went live in June 2013.

In partnership with our stakeholders, we have hosted or contributed to 32 engagement events to date, communicated to over 1,000 people and had direct feedback from around 500 people. A further 20 events are planned throughout the year including Kent's Coastal Week "Kent's Changing Coast" during the autumn half term 2013.

Towards the end of 2013 community workshops will be held to integrate all the feedback and data gathered over the last two and a half years. Dates for these workshops will be published on the website - kentCC2150.org.uk

After these workshops, a draft vision and action plan will be distributed for consultation. Once finalised, we will take the plan to local groups to establish ownership of overseeing the actions – launching the plans and visions into the community in March 2014.

Climate Local target : We will assess our services for risks and opportunities and build resilience to climate change into our work.



National roll out of Kent's severe weather monitoring tool

With the changing climate, the frequency of severe weather events is expected to increase and is likely to add costs to the public sector. During 2012, 14 severe weather events were logged on Kent's Severe Weather Impacts Monitoring System (SWIMS) including: 11 storms, two low temperatures (including heavy snow) and one drought event that cost the community of Kent £852,387.

Developed by KCC, SWIMS is an online data capture facility enabling teams/business units across the Kent public sector to record how their service is affected during severe weather events to inform decision making and long term planning and ensure the future costs and impacts of these events is minimised.

Currently, 56 public sector services have signed up to SWIMS, including Kent Fire & Rescue Service, the NHS and Environment Agency and 10 district councils.

The success of SWIMS has been acknowledged nationally as a finalist for the Best Climate Ready Initiative at the Climate Week Awards 2013 in March and through a workshop session on SWIMS at the Local Government Association (LGA) Climate Local conference in March 2013. SWIMS is now being made available nationally through Climate Ready and is an action within the National Adaptation Programme.

Protecting Kent from flood risks

In January 2013 a report analysing the long term risks and opportunities for water systems in Kent was produced.

76,000 Kent properties have been identified as at risk from river, ground and surface water flooding. In response to this and the Flood and Water Management Act of 2010, Kent County Council has developed a local flood risk management strategy that aims to identify, understand and minimise the risks from local flooding in Kent, protecting properties and reducing the impact of these events for public services, residents and businesses.



Environment Agency Floodline Warnings Direct

Using the latest available technology, the Environment Agency monitors rainfall, river levels and sea conditions 24 hours a day and uses the information to forecast the possibility of flooding. If flooding is likely, three different warning types can be issued: Flood alerts, flood warnings and severe flood warnings.

Deal sea defences

Dover District council, in partnership with the Environment Agency and KCC have acted to improve Deal sea defences for 1,250 properties reducing the risk of coastal flooding from once in every 20 years to once in every 300 years.

This has been achieved through installing a 200m rock revetment and splash wall at Sandown Castle. This work started in October 2012 and has been completed to save recharging the beaches with shingle.

Sandwich sea defences

Over 500 properties in the Sandwich area are to benefit from reduced risk of flooding as a result of the Sandwich Town Tidal Defence Scheme. This £20m scheme commenced early in 2013 and includes 14km of improved and raised defences on the River Stour, new tidal flood storage at Broadsalts and a new floodwall at Sandwich Quay. The project is due to complete in spring 2015. This reduces the coastal flood risk from one in every 20 years to one in 200, and includes businesses based at Discovery Park.

The scheme has been jointly funded by Government, Kent County Council and Pfizer, and is one of the first to use Defra's new partnership approach to funding flood defence schemes.



Dalby Square – climate, changing design

As part of the Design for the Future Climate Change Programme (D4FC), Thanet District Council and partners have recently finished a project in Dalby Square, Cliftonville that will provide design guidance for increasing the resilience of typical seaside properties to climate change.

The project focused on large 3-4 storey Victorian and Edwardian properties, typical of seaside resorts across the south coast. The project has identified the most effective means of improving such buildings to minimise the effects of climate change in the next 70 years.

The aims were to improve:

- thermal comfort and overheating
- energy costs and ability to afford heat and power
- water availability and management
- building detailing.

Whilst measures can be expensive, the benefits extend beyond energy savings and resilience to climate change such as external insulation may reduce bills and save money but will also reduce damp ingress and keep buildings cool in the summer- these issues cannot always be assessed in a financial way.

There is great potential to expand the lessons learned from this work, with an estimated 18,000 similar properties in Thanet and a further estimate of 175,000 requiring adaptation in England.

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