



SUSTAINABILITY

Living within Environmental Limits
& Enhancing the Environment

April 2017



Our aim:

We aspire to a healthy, just society, living within environmental limits by achieving a sustainable economy, promoting good governance and using sound science responsibly.

Cutting Greenhouse Gas Emissions

Issues of concern and current position

Tackling climate change is one of the greatest challenges that we face as a society. The environmental, social and economic impacts of climate change are already being felt and they will continue to grow in severity. CO₂ emissions from burning fossil fuels like coal, oil, gas and petrol are the biggest contributory factor at 85% though there are other potent greenhouse gases especially connected with food growing, transportation, disposal and refrigeration/cooling.

Preventing man-made climate change is challenging. We have a long way to go before the dramatic reductions required can be achieved.

In England and Wales, the Climate Change Act 2008 set an 80% carbon emissions reduction target by 2050 and a 35% reduction by 2020. Locally, Brighton & Hove have set a 42% target for 2020 and the recently published performance figure for the city for 2014 of 33.4% suggests that we are on track to achieve this target. However, measuring our per capita carbon reduction performance against 16 other comparable cities nationally we are only 8th and this is generally much higher than the average UK resident's.

An analysis of this shows the following areas have most impact:

- The city housing stock is old with 66% built before 1945. This sector currently represents 40% of our carbon emissions
- Use of cars - fuel consumption, vehicle purchase and maintenance
- Food, eaten in the home and provided in the hospitality sector
- Consumption of consumer goods, in particular household appliances

The City Sustainability Action Plan brings together a portfolio of work across the city that works to address this. It sets out high level objectives in key areas such as energy, food and transport, supported by ambitious projects aimed at reducing carbon emissions in the city. Some of the areas include:

- Projects to reduce energy consumption in our homes and buildings.
- Street lighting conversion programme converting all street lanterns to energy efficient LED lighting.
- Increasing the implementation of renewable energy technologies
- Supporting low carbon modes of transport and reducing the need to travel

- Promoting and encouraging local food production and a reduction in food waste

Many of our homes, buildings, businesses and services need to be much more energy efficient and make more use of renewable energy. With such old housing stock in the city, addressing fuel poverty continues to remain a challenge. In 2014 fuel poverty in Brighton & Hove was estimated to affect 12.3% of households, higher than the South East average.

Uptake of renewable energy in the city is still relatively slow, despite an excellent solar energy resource – one of the best in the country. Whilst the incentive for renewably generated electricity offered through the Feed in Tariff has reduced, the business case for solar photovoltaics is still good.

Achieving sustainable development is a major objective of the City Plan. The city's housing target in the City Plan Part One is to build at least 13,200 new homes over the period to 2030, and these need to be delivered sustainably. The adopted City Plan Policy CP8 Sustainable Buildings sets the minimum standards for new development. At the same time 42% of the city's carbon footprint comes from existing housing, so there is even greater pressure to reduce emissions from this stock.

Since adoption of City Plan Part One, all planning applicants have been expected to deliver low carbon design in advance of current national standards unless this is not technically or financially viable. As part of this they must demonstrate how energy efficiency has been maximised and low and zero carbon energy technologies have been incorporated into designs to deliver reduced carbon emissions and fossil fuel energy. City Plan Part Two will develop further policy to incentivise carbon reduction in new and existing development, exploring in particular decentralised, smart, renewable energy systems.

Heat networks are continuing to increase in the city, with planned expansion of existing schemes at the Universities and Royal Sussex County Hospital and new heat networks coming forward at all major strategic development sites with proposed development.

What has happened over the last three years

Brighton & Hove City Council has signed up as an affiliate member of the Your Energy Sussex (YES) partnership, an energy saving partnership between local authorities across Sussex and Carillion (a leading UK energy services provider). YES is aiming to reduce fuel bills and CO2 emissions for Sussex residents and businesses and has a range of projects across the county.

Through funding from the DECC Heat Network Delivery Unit, four feasibility studies for city heat networks have been undertaken (in heat priority areas) to explore techno-economic feasibility. These place affordable warmth as a key priority.

- Eastern Road and Clarendon Road studies have been completed with the aim to further develop the opportunities & potentially produce robust business cases and models for the installation of heat networks in these areas.
- A heat network study for Toads Hole Valley has been completed identifying a viable scheme in the Hangleton area. Planning policy with heat network design guidance has been published for consultation.
- A study for a heat network for Shoreham Harbour has been completed but the project has now been handed over to Adur & Worthing Councils as the scheme will not have capacity to supply heat into the Brighton & Hove Authority area.

Significant spend has been carried out to improve the energy efficiency of our own housing stock. Energy Performance Certificate (EPC) data for our own housing Shows an average SAP rating of 65.2 (end of June 2016) which is in Band D (55-68). The average for England & Wales at this time was 60 (also Band D). Improvements in SAP rating are largely down to a history of upgrading the property with measures such as:

- Cavity wall insulation, loft insulation and double-glazing;
- Installing more efficient gas condensing boilers. The HRA capital programme has invested significantly in upgrading heating across our properties. The strategy in place since 2007 is for all properties with a gas supply to have “A-rated” appliances by 2021/22. The impact of this programme is significant as the effect of upgrading from a “D” to “A” rated boiler can save on average £105 per household per annum (based on estimates from the Energy Savings Trust).

For properties not on the gas network or technically not suitable for gas boilers the developing HRA Energy Strategy will set out alternative options to be considered such as heat networks and other low-carbon technologies.

There have been larger projects too:

- Overcladding at Bristol Estate; and high rise blocks such as Essex Place, Warwick Mount, Kingfisher Court; Hereford Court, Wiltshire House, saving an estimated 525 tCO₂ p.a.;
- Upgrading lifts and switching to LED lighting systems that are more efficient;

Through investing £1.6M, we now have around 400 solar PV arrays on our own housing stock (including new build), with estimated savings of 1176 tCO₂ to date.

Carbon emissions from our own housing stock have been reducing due to above actions – estimates are that emissions have reduced from 46,000tCO₂ per annum to 30,000tCO₂

District heating potential in the city has been explored in detail at four sites following awards of funding from the government’s Heat Network Delivery Unit. Sites explored are Eastern Road, Hove Station, Shoreham Harbour and Toads Hole Valley. Business cases are being taken forward for heat network

delivery at Hove Station and Shoreham Harbour (initially led by Brighton & Hove City Council and now led by Adur and Worthing Councils). Policy to secure a Heat Network for Toads Hole Valley is being explored for the new Supplementary Planning Document for the site as part of the aspiration for an exemplar scheme for the site.

Planning guidance has been developed and adopted to assist householders in improving the energy efficiency of existing housing particularly in older 'hard to treat' stock. These are the Planning Advice Note on External Wall Insulation and the Planning Advice Note on energy efficiency for historic housing in Conservation Areas.

The Eco Open Houses event has showcased homes and buildings that have been built or retrofitted to exemplar and zero carbon standards. This provides a forum for peer to peer learning, networking, promotion of best practice and professionals in sustainable construction.

Community Energy – Brighton & Hove's two main energy service companies continue to flourish with some great achievements and exciting new projects on the horizon

Brighton & Hove Energy Services Company (BHESCo)

In January 2016 BHESCo launched its Energy Saving Service designed to help local homes & businesses reduce their energy use, carbon emissions, and fuel bills. Since then we have visited over 240 properties, of which 234 were free assessments to help people in fuel poverty. We conducted 24 paid for energy assessments and installed energy efficiency measures in 150 properties. In total, this service has saved customers £34,000 on annual fuel bills and lowered carbon emissions by 66 tonnes. In recognition of our innovative new service, which brings care back into the energy industry, BHESCo was given the Energy Savings Award by Community Energy England and a Heat Heroes Award from National Energy Action.

In addition, since October 2015, BHESCo have completed fourteen community energy projects generating 50kW of electricity and a heat network in Horsham generating 80kW. In our first year of project development, we have saved small businesses in our city £15,000, by installing energy efficiency systems, generating 143,000 kWh of clean electricity, the equivalent of the annual electricity consumption of 36 homes, while removing 68 tonnes of carbon emissions from the atmosphere.

Brighton Energy Cooperative

Since 2014 Brighton Energy Coop have installed 865kWp of community funded solar PV on sites in Brighton and the South East. We have raised just under £1M (in addition to £0.5M raised in 2010-14) and doubled our membership to 350 members. We have also funded a PV array on the Earthship and 30 energy assessments for people in fuel poverty as part of BEC's community fund.

Green Growth Platform

Since launching in 2014, the University of Brighton's Green Growth Platform has brought together a thriving network of 750 green businesses. It helps its members to grow - through a menu of business coaching, product and service development support, access to funding, events and skills development - and it builds connections and facilitates collaborations across its membership base.

The Green Growth Platform is at the heart of a flourishing low carbon economy across Sussex. Its work has helped create over 130 green sector jobs in the region and it has worked with local businesses on over 60 projects to develop new low carbon products and services. Visit greengrowthplatform.co.uk for more information.

The University of Brighton

Over the past three years the University of Brighton has achieved a 13% reduction in energy-related carbon emissions through an ambitious programme of technical projects and behaviour change campaigns. This improvement in environmental performance has occurred despite a 7.5% increase in the University's estate and an enriched student experience, with several buildings having extended opening hours and many others with enhanced functionality.

Carbon reduction projects include the installation of 240kW of solar photovoltaic arrays on the roofs of 11 buildings, lighting refurbishments in two library buildings, and investment in the University's building management system (BMS) to improve energy efficiency. This has been supported by the University's in-house 'c-change' campaign to engage with students and staff throughout the University, to promote sustainability initiatives and to encourage environmentally responsible behaviour when studying or working on campus.

The University is also working to promote sustainable travel when travelling to or between campuses, with the launch of a car-sharing and journey-planning platform, investment in cycling facilities and the promotion of public transport options in Brighton.

What we plan to do

The HRA capital programme up to 2020 includes significant investment to increase the energy efficiency of our housing stock, and reduce CO2 emissions, this is primarily focussed on domestic and communal heating improvements, insulation (incl. over-cladding) and some investment in renewable technologies.

Building on the above we are developing an HRA Energy Strategy, alongside tenants and leaseholders, throughout 2017. This will set out how we can improve the energy efficiency of our housing stock, focussing on the benefits this can generate for tenants, leaseholders and the city more widely. A key

ambition will be to meet the Fuel Poverty Regulations (England 2014). The strategy will work alongside and complement both the wider HRA Asset Management Strategy and the Fuel Poverty and Affordable Warmth Strategy.

The aims of the HRA Energy Strategy will be to set out how we can ‘future proof’ housing, specifically aiming to;

- reduce energy use and costs for residents;
- increase health & well-being;
- and improve, high-quality housing stock that lowers carbon emissions.

In addition to the above capital improvements we have been successful in securing EU funding for the SHINE project to tackle carbon emissions and fuel poverty in the city. SHINE stands for Sustainable Houses in Inclusive Neighbourhoods and is made up of 14 Flemish, Dutch, French and British partners who are working together to explore different ways to speed up renovation and behaviour change for residents in the partner areas. The project will run until 2020.

In Brighton & Hove the aims of SHINE are to;

- work with residents in council housing properties to monitor the impact of maintenance and capital works programmes and behaviour change on energy efficiency and fuel costs
- provide a rolling programme of energy efficiency/fuel poverty awareness training for staff, contractors and residents
- train and support a cohort of volunteer resident energy experts to provide advice, support and signposting to residents
- provide energy saving kits and energy advice visits for residents and test new technology to track and reduce energy use

A key element of this project will be to capture the benefits to resident’s health and wellbeing from improving the energy efficiency of their homes, and help inform future capital investment.

We will also participate in the Your Energy Sussex (YES) energy tariff scheme, with the aims of;

- Reducing the number of householders in or at risk of fuel poverty;
- Offer more competitive tariffs and encourage the 70% of the market that does not switch suppliers, to switch - in particular vulnerable households
- Supporting the local economy;
- Helping to meet local carbon reduction and renewable energy targets;
- Increasing investment in local generation;
- Offering the latest Smart metering technology for customers in advance of the national roll out by 2020;
- Establishing a local fund to support Sussex energy and fuel poverty projects ; and

- Providing access to customer and energy consumption data in order to identify, target and support further projects.

We are part of an emerging partnership of housing providers within the Local Enterprise Partnership area looking to explore models for self-funding large scale retrofit to near zero carbon standards. If funding is secured it will allow for the development of an innovative pilot project on properties in the region with an aim to move to large scale in the future.

We will continue to signpost residents through our home energy efficiency web pages to Smart Energy GB for information and advice about smart meters <https://www.brighton-hove.gov.uk/content/housing/general-housing/are-you-getting-best-value-your-gas-and-electricity>

We will continue to work with local third sector organisations, through the Fuel Poverty & Affordable Warmth Steering Group, to help ensure the vulnerable e.g. elderly benefit from energy efficiency measures to their homes, to help ensure they stay warm, while reducing excess winter deaths and associated ill-health problems.

In Planning:

- We will work with developers to ensure best practice in energy efficiency and the use of sustainable energy.
- Achieve highest possible standards for housing through applying CP8 Sustainable Buildings. These require the achievement of building standards above the national minimum (19% carbon reduction improvement against Part L 2013 and enhanced water efficiency).
- By 2017 75% of new dwellings will meet energy standards (19% improvement on Part L 2013) and water standards 110 litres/person/day
- On-site renewable energy technologies will feature in new build and on existing buildings where feasible.
- Continue to work towards the energy target: 15% of the city's energy to be generated from renewable technologies by April 2020.
- Explore ways to ensure that housing delivered in existing buildings that comes through the planning system is delivered to high energy efficiency standards through adoption of policy in City Plan Part Two.

Over the coming years the University of Brighton launches a new Carbon Management Plan, with plans for further renewable energy systems, building refurbishments and improvements to the efficiency of energy-intensive laboratory buildings.

Community Energy

BHESCo - The next three years will bring many new and exciting projects. We will be collaborating with other energy co-operatives across the country to deliver energy efficiency retrofits under ECO2t. We will be continuing to service small businesses helping them to lower their operating costs, keeping their shops open for business and their families earning an income so that our

high streets continue to thrive with the diversity for which our city is renowned. We will also be helping our community centres lower their costs so that they have more economic security, enhancing their ability to service the people in their local community.”

BEC - Going forward we are working with the Big Lemon on a 31kWp scheme to power their electric buses, will be installing 150kWp at the University of Brighton in Eastbourne and plan another 500kWp array on a commercial site in summer 2017.

A City Adapting Well to Climate Change

Issues of concern and current position

This is a core component of the city’s Climate Change Strategy. Climate change is with us here and now and will get significantly worse before (if) it gets better due to the greenhouse gas emissions already in the atmosphere and their delayed impact.

The UK Climate Impacts Programme - which leads UK scientific consensus on impacts – says the South East of England will continue to be most affected in the UK.

UKCIP 09 projections show changes modelled by 2020 may well include:

- Average temperature increases of 1-1.5 degrees C
- 5-15% less rainfall, especially in summer months, increasing the likelihood of drought
- More extreme weather events such as very hot days, drought, storm surges, and heavy rainfall – increasing the likelihood of flooding

Brighton & Hove has been identified by the government as an 'area of serious water stress'. The city’s water comes only from underground sources and so we are vulnerable to short, severe droughts. Climate change will mean that we are likely to see longer periods without rain and so experience water shortage in the future.

The pressures on water resources are set to increase through additional demands from population growth and new housing. Greater water efficiency, especially within existing housing stock, is essential for the sustainable management of water resources and the health of the environment.

Flooding through torrential rainfall had a serious impact on Sussex in 2000 and continues to be a major area of concern, with several flooding incidents since. Fears about flood and drought are not incompatible, as one feature of climate change is disruption to usual weather cycles, with more frequent extreme periods of weather events.

So we need a better and sophisticated shared understanding across the city of the risks (and some opportunities) of climate change to our infrastructure and economy, our communities and our wildlife and habitats.

Other areas like Kent and East Sussex are ahead of us on this and we can learn from them.

Flood and Coastal Erosion Risk Management work focuses on delivering actions in Catchment Flood Management Plans (CFMP) and a second Shoreline Management Plans (SMP2).

What has happened over the last three years

Responding to climate change is a key consideration in the City's Climate Change Strategy and in the City Plan.

A Local Climate Impact Profile study looked into the impacts on the city of the 34 severe weather incidents locally between 2000-2010. This tool is designed to enable local authorities to understand how their council services are affected by historical climate events and how they can learn from such experience to adapt to a future climate. Basic analysis of Climate Projections has been undertaken.

The Sussex Resilience Forum actively monitors climate change impact risks such as flooding and heat wave and manages the Community Risk Register for the whole of Sussex.

Flooding

Serious flooding in England in 2000, again in the summer of 2007 and in the winter of 2013/14 has significantly raised the profile of this issue right across local government and emergency planning.

A city Strategic Flood Risk Assessment was produced in March 2008 and updated in 2011 in line with national policy on development and flood risk. This will be regularly reviewed to ensure it contains the latest data, planning policy and legislation.

A major incident emergency planning exercise was held in winter 2008/9 to test planning – in this case for a tidal wave hitting the coast.

The city's Surface Water Management Plan (flood modelling) was completed in 2013 and the Environment Agency published a Preliminary Flood Risk Assessment for the city, with Flood Hazard and risk maps and a Flood Risk Management Plan to follow.

A Brighton Marina to River Adur Flood and Coastal Erosion Risk Management strategy is underway and is due to be completed after consultation in 2014.

Brighton Marina to Newhaven coastal strategy: consultants are being appointed to review existing strategies and make recommendations for areas to be updated.

Drought

To help customers save water and reduce their water footprint, Southern Water has installed 80,000 water meters in Brighton and Hove. Metered households use between 10 to 18 per cent less water in comparison to un-metered properties.

A drought with hosepipe bans in 2011/12 led to the formation of a council officer drought group which temporarily developed into a Sustainable Water Officer Group to help draw up the Sustainable Water Action Plan under One Planet Living, working with the Environment Agency

Southern Water invested £15 million over three years in replacing 35 miles of old Victorian water mains across the city with modern piping and the leakage rate is relatively low

The City Plan is seeking to introduce strong sustainable building standards which will require minimum levels of water efficiency performance in new development.

Water Quality

The council has completed a review of farming activities on the City Downland Estate to better understand the relationship between farming operations and groundwater quality. A project team of key stakeholders was established, including the City Council, The Environment Agency, Southern Water, Smiths Gore and Plumpton Agricultural College.

The majority of farms on the City Downland Estate volunteered to be independently appraised to ensure accurate application of fertilisers and the improvement of chemical and oil storage facilities. The project team concluded that the City Downland Estate tenants were farming in accordance with current legislation and best practice thereby minimising the potential risk of nitrate leaching into the chalk aquifer holding much of the City's groundwater.

A new wastewater treatment works at Peacehaven is operational, reducing sewage pollution in the sea.

Beachy Head West, the chalk shelf lying offshore between Eastbourne and Brighton Marina, was designated a Marine Conservation Zone in November 2013, one of just 27 nationwide. It contains some of the best examples of chalk habitat in the south east region.

What we plan to do

Objectives:

Surface water:

- Reduce Flood Risk to homes vulnerable to surface water flooding.
- Slow water entering the drainage network to reduce flooding.

- Reduce urban pollution sources of drainage networks, watercourses and the sea.
- Have best practice approach to water drainage and storm water in refurbishments and new builds

Groundwater:

- Improve groundwater quality and quantity which is a requirement of the Water Framework Directive – through engagement with Catchment Management Plans
- Reduce flood risk to sites at risk from groundwater flooding.

Drinking water:

- Reduce water demand in new housing and current housing. Increase re-use of water.
- Help reduce demand from business.

Seawater:

- Using evidence we will better understand the marine environment and its pressures.
- We will reduce our impact on sea water quality and maintain recreation and local fisheries.
- Manage the coastline to protect properties from tidal flooding.

Activities:

Coastal studies:

Brighton Marina to River Adur Flood and Coastal Erosion Risk Management strategy – A range of options for managing coastal erosion and flooding in the future are out for consultation until 17 June. Following this consultation these options will be evaluated in more detail, a short list drawn up and put out to a further round of consultation later in the year.

A report will come to committee in summer 2014 for permission to submit the final document to the Environment Agency for approval.

Brighton Marina to Newhaven coastal strategy – detailed work on a revised and updated strategy for the coast from the Marina to Newhaven will begin next year, led by Lewes District Council, with grant aid from the Environment Agency, this will review the existing strategy - now over 10 years old.

Surface Water Management Plan:

Phase 3 includes: Consideration of viable mitigation options for any flood risk areas and assess the cost/benefit implications; and preparation of a Flood Risk Management Plan (by 22nd June 2015)

Furthermore, development and oversight of a Local Strategy for Flood Risk Management will also be required. This will be a public document, which will not only identify areas of local flood risk and mitigation proposals, but it should also indicate timeframes for implementation and the source of funding for any works.

The Local Climate Impact Profile work made steps towards raising awareness of climate change adaptation across the organisation within Brighton and Hove City Council. Much more could be done across the city to improve resilience and preparedness, including detailed analysis of the local climate projections, a comprehensive assessment of risks and opportunities of our changing climate and a community engagement programme to increase resilience in severe weather.

An adaptation group was convened with a remit to agree the best approach in taking forward actions identified in the Local Climate Impact Profile (LClip) work, and regional links are being explored through the Environment Agency, which now is the responsible authority for Climate Change Adaptation.

Joint working opportunities should be further explored with neighbouring local authorities, organisations and public sector bodies.

The Brighton & Hove and Lewes Downs Biosphere Partnership, for which BHCC is the lead partner, is actively engaging with Southern Water on a catchment management approach to both rural and urban pollution prevention of the groundwater aquifer.,

Waste, Recycling & Street Cleanliness

Issues of concern and current position

Together with East Sussex County Council, the council has let a 30 year integrated waste management contract worth about £1 billion which has facilitated the development of a network of modern facilities to manage waste collected by the local authorities more sustainably.

In 2012/13 just 6% of waste was sent to landfill for disposal, down from 42% in 2009/10.

The amount of residual waste (not recycled or composted) per household has declined from 629kg per household in 2009/10 to 591kg per household in 2012/13.

About 26% of household waste was recycled or composted in 2012/13, a slight decline from previous years. This is believed to be due to a number of factors including the economic downturn and changes in consumer behaviour (e.g. fewer newspapers and magazines being bought).

98% of properties have a recycling service, either a kerbside collection or communal recycling bins for blocks of flats.

In East Sussex and Brighton & Hove, construction and demolition waste accounts for over half of all waste produced.

Following a consultation on communal bins this service now covers properties in central parts of the city. This has resulted in cleaner streets and increased levels of satisfaction with the service.

The recycling and composting rate needs to be maximised in an environmentally and financially sustainable way, in particular maximising materials captured through existing services.

Residents need to feel recycling and refuse collections are reliable.

What has happened over the last three years

The Domestic Waste Management Strategy was reviewed in 2012

Communal refuse bins have been introduced in the central parts of the city

Communal recycling has been trialled for 3,200 households with a 70% increase in recycling weight collected and improved levels of satisfaction with the service. Following the trial, grant funding has been secured and following a positive response to the consultation the scheme is being rolled out to 32,000 properties in the central parts of the city which is expected to increase recycling rates by up to 3%.

30 community composting schemes have been set up across the city, predominantly in more densely populated areas

40 recycling bring sites have been refurbished and the program is on-going

Continued collaboration with Food Partnership has encourage people to waste less food and compost food waste.

Brighton Paper Round is now operating a food waste collection service with 70 businesses signed up so far and collecting 20 tonnes per month.

Nearly 20,000 compost bins have been sold since 2005 which has helped divert over 2000 tonnes of garden and food waste from the waste stream.

Nearly 700 households are using community composting sites helping to divert over 4 double decker buses worth of food waste from the waste steam.

The materials recovered at the HWRS have been increased to include MDF and non-glued wood, plasterboard and energy light bulbs

A supplementary planning document on construction and demolition waste helps deliver more sustainable management of that waste stream and to minimise the amount of construction waste sent to landfill.

A Waste and Minerals Plan, produced in partnership with East Sussex County Council and the South Downs National Park Authority has been adopted. This

includes stringent targets for increasing recycling and recovery of all waste streams (Local Authority Collected Waste, Commercial and Industrial Waste, and Construction, Demolition & Excavation Waste). It is understood to be the first strategic waste plan in the country not to make any provision for further landfill development.

The three authorities have begun work on a Waste & Minerals Sites Plan which will allocate sites for the new recycling and recovery facilities which will provide the capacity required to achieve the targets.

Comprehensive waste infrastructure to divert waste from landfill including a Materials Recovery Facility (Hollingdean); an 'In-Vessel' composting facility and an Energy Recovery Facility (Newhaven) has been completed and is now fully operational.

Work is continuing with the SE7 group of authorities to explore how partnership working can improve waste management practices in the region and reduce costs.

What we plan to do

Objectives:

- Promote reuse and recycling to high value uses, including closed loop recycling (see also Sustainable Materials)
- By 2025, 70% of domestic waste by weight will be recycled or composted. The target is that residual waste will reduce by 10% per household by 2025.
- By 2020, no more than 2% of all waste (domestic, commercial or construction) by weight will be sent to landfill – the rest is reused, recycled, composted or burned for energy recovery.
- Develop the infrastructure to enable recycling of commercial waste to achieve a trajectory towards zero waste by 2025.

Strategy: Reduce waste and increase re-use

- Work with the charities and community sector to promote re-use, through online schemes and business partnerships.
- Maximise re-use and local income from textiles via bring banks and local charities
- Open further re-use facility at Brighton Household Waste and Recycling Centre.
- Promote re-use charities and partners, e.g. working with Universities.
- Continue collaboration with the Food Partnership to educate residents on preventing food waste.

Increase recycling rates

- Complete roll out of communal recycling by Spring 2014
- Continue to review opportunities to collect additional materials for recycling

- Maximise recycling rates using existing services through effective engagement with residents and community incentive campaign linked to recycling rates
- Redevelop Brighton HWRS in to a split level site which will improve accessibility and recycling rates. The plans are subject to planning permission.

Increase composting

- Encourage further community composting schemes for food and garden waste.
- Food Partnership and council campaign to promote subsidised home composters and digesters and compost awareness.

Commercial and other waste

- Launch council commercial refuse collection trial In 2014

Waste minimisation and prevention

- Support the food waste reduction campaign by the Food partnership and BHCC.

Built Environment

Issues of concern and current position

The city's assessed housing requirement to 2030 (30,120 dwellings) are much higher than the city can realistically accommodate.

What has happened over the last three years

The City Plan Part One was adopted in March 2016 The City Plan Part One will help to deliver a number of priorities in the city around employment and training, retail, travel, housing, climate change, design, good public realm, open space and community safety.

Work has started on the preparation of the City Plan Part Two which will contain the remaining development policies and site allocations. A Scoping Report was published for consultation in June 2016.

An updated Statement of Community Involvement was adopted in March 2015. This document sets the councils approach to consultation on development plan and supplementary planning documents as well as the approach to consulting on planning applications.

Rates of housing delivery in the city are now improving following the impacts of economic recession and the housing market downturn Whilst the availability of development finance and funding has impacted on the number of major

developments there are signs of improvement with a number of major schemes approved in recent years and a number in the pipeline.

Various planning briefs, supplementary planning guidance and development plan documents have been prepared to help deliver key development sites across the city. A revised draft Shoreham Harbour Joint Area Action Plan was published for consultation in November 2016. A draft Supplementary Planning Guidance for Toads Hole Valley was published for consultation in April 2016 a significant strategic site for the city.

In light of the improved economic conditions the council has removed the temporary 'recession' measures and regularly review s106 developer contributions technical guidance to enable appropriate development to come forward.

The Council is assessing the potential for introducing a Community Infrastructure Levy (CIL) and work commenced in September 2016 with an outline timetable currently set out for adoption by 2018. CIL is a mechanism introduced by the Government, whereby local authorities are allowed to raise funds from developers undertaking new building projects in their area to be used on a wide range of needed infrastructure resulting from development. It is possible that CIL may be replaced by a Local Infrastructure Tariff and the government intends to clarify this in Autumn 2017.

An updated Parking Standards (SPD) has been adopted to provide updated, clear information and guidance to ensure the right level of parking for developments in different locations across the city. A Shoreham Harbour Flood Risk Management Guide SPD was adopted in 2015.

To avoid further increases in concentrations of student housing in certain city streets, the council is positively managing – through the use of an Article 4 direction - the location of new HMOs in order to create sustainable, healthy and inclusive communities. The City Plan Part One encourages and manages development of new purpose built student accommodation.

The Localism Act 2011 introduced Neighbourhood Planning whereby town and parish councils or designated 'neighbourhood forums' prepare and agree a land use plan for their neighbourhood. Four neighbourhood areas have been designated, one of which was designated a Business area. Four Neighbourhood Forums have been designated and the four neighbourhood communities (Rottingdean Parish, Hove Station, Hove Park and Brighton Marina) have indicated an intent to produce a Neighbourhood Development Plan. None yet have been subject to formal pre-submission consultation.

Following the introduction by the government of a 'duty to cooperate', the council has been proactively working with neighbouring local authorities to establish mechanisms to address and plan for strategic priorities across boundaries. This has included a review of the Local Strategy Statement for the Coastal West Sussex and Greater Brighton Area.

The South Downs National Park Authority is now the planning authority for the administrative area of Brighton & Hove that falls within the National Park. A review has been undertaken of the five 'downland village' Conservation Areas.

An updated Local List was adopted on June 2015.

A Character Statement for the Old Town Conservation Area was adopted in March 2017.

What we plan to do

- Achieve highest possible standards for green sustainable building through applying CP8 Sustainable Buildings. These require the achievement of building standards above the national minimum for non-residential development (reaching 'very good' or 'excellent' BREEAM standards).
- On-site renewable energy technologies will feature in new build and on existing buildings where feasible
- Continue to work towards the energy target: 15% of the city's energy to be generated from renewable technologies by April 2020.

Following the adoption of the City Plan Part One, successfully implement the strategy to achieve a balance between accommodating the city's range of development needs, particularly those for homes and jobs, with the continuing need to protect and enhance the city's high quality historic, built and natural environments and the nationally designated landscape that surrounds the city.

Prepare and submit the City Plan Part 2 for independent examination, the City Plan Part Two which will contain the remaining site allocations and development management policies.

Continue to work proactively and positively with neighbouring authorities to resolve the sub regions un-met housing needs through 'duty to cooperate' activities. Prepare Local Strategic Statement 3.

Prepare jointly with Adur District Council, West Sussex County Council and Shoreham Port Authority and respond to consultation on the South Downs National Park Local Plan

Adopt the Urban Design Framework SPD for the city to help deliver high quality design in the city.

Complete the review of the Conservation Strategy which will set future priorities for reducing heritage at risk within the City. Prepare an Old Town Management Plan and update the Queens Park Character Statement.

Adopt the Toads Hole Valley SPD to guide future development of this significant strategic allocation to secure a sustainable city neighbourhood providing homes, jobs and a secondary school and recreational and community facilities.

Neighbourhood Planning – provide technical support and guidance to neighbourhoods.

Plan positively for high quality, inclusive and sustainable design in all developments (single buildings, public and private spaces and larger projects).

Ensure the creation of a built environment access to all which promotes physical and social activity. All homes should meet the lifetime needs of residents through the adoption of the nationally described space standards and higher optional standards for access.

Encourage developers to undertake early consultation with local residents and community infrastructure (such as Neighbourhood Forums) on major planning applications.

Biodiversity and the Natural Environment

Issues of concern and current position

The city is home to a great variety of common and rare animal and plant species, including European Protected Species such as Dormouse, Great Crested Newt and several species of bat. It also supports 278 hectares of unimproved chalk grassland and just under a hectare of coastal vegetated shingle, which are both habitats of UK and European importance. In total, one-sixth of the city's area is covered by a nature conservation designation and 10% of its land surface is occupied by semi-natural habitat.

The city is home to the national elm collection. This is of international importance for preserving elms and also serves to protect the wildlife that depends upon it. Much of the collection are street trees serving the added benefit of being heat sinks and taking up pollutants.

The city has about 50 active 'friends' groups working to conserve green spaces.

Urban vegetation lessens climate change effects by reducing a city's "heat island" effect and filtering UV rays.

Brighton & Hove currently has seven 'green flag' parks (The Level, Easthill Park, St Ann's Well Gardens, Preston Park, Kipling Gardens, Stoneham Recreation Ground and Hove Park).

There is no clear picture of how biodiversity is changing locally but available evidence points to a continuing loss of species and habitats. People benefit from experiencing nature as a part of everyday life but increasing urbanisation and sedentary lifestyles mean that many are becoming more isolated from it in practice.

What has happened over the last three years

Local authorities have a legal duty to further biodiversity, set out in Section 40 of the Natural Environment and Rural Communities Act 2006.

More new developments have incorporated biodiversity features and a linear 'eco park' has been created as part of the Brighton Station development.

A detailed audit of the habitats of importance in the urban and rural areas of Brighton & Hove has been carried out which for the first time provides a detailed baseline for the future monitoring of habitat change.

An international conference was held in the city in October 2008 to look at the opportunities created for people and the environment of being designated by UNESCO as a Biosphere Reserve. This resulted in official designation in June 2014 of the Brighton & Lewes Downs UNESCO World Biosphere Region, now known as "The Living Coast" www.thelivingcoast.org.uk.

The 2009 Green Network Study informed the South Downs Way Ahead Nature Improvement Area (NIA). The NIA landscape scale designation was endorsed and announced by the Government in February 2012, and a DEFRA funded project ran for 3 years until 2015 to implement practical improvements of urban wildflower planting including creation of 'butterfly banks'. The 'Big Biodiversity Butterfly Count' is an established, annual event.

The council has a team of Park Rangers with a remit to support community involvement in green space across the city including developing new Friends groups.

The city's Sites of Nature Conservation Importance were reviewed in 2013 to address new national monitoring requirements and to measure the quality of key habitats in the city, with a suite of proposals for Local Wildlife Sites produced.

The City Plan Part One includes designated open space and the NIA planning designation. It sets open space standards and includes policies to ensure future developments contribute towards meeting open space requirements and improving biodiversity.

The Brighton & Hove Biodiversity Action Plan (BAP) was published in 2013.

An Open Spaces Strategy for Brighton & Hove was published in 2017.

What we plan to do

Ensure future planning proposals help to achieve the aims of the green network/NIA, to help climate-proof the biodiversity of Brighton & Hove, address habitat creation targets and to make it easier for people to experience nature as part of everyday life in the city. Integrate climate change adaptation planning into this work.

Implement the supplementary planning document on Nature Conservation and Development to promote the integration of biodiversity into development.

Ensure the review of the city's Sites of Nature Conservation Importance informs the designation of Local Wildlife Sites in the City Plan Part Two.

Maintain traditional sheep grazing across 110 hectares of key chalk grassland sites in the city to safeguard their nature conservation value.

Encourage further wildflower habitat creation schemes and pollinator planting, working in partnership under the Biosphere programme.

Seek to conserve and enhance the city's 'green infrastructure' and green network through greater integration in public sector policy and management practice.

Open Spaces Strategy adopted policies:

a) Promote and pursue positive conservation management of semi-natural habitats on the council's managed land holdings, especially in designated nature conservation sites, the Nature Improvement Area, priority habitats and those acting as a wildlife stepping stone, and for priority species.

b) Seek ways to encourage investment in the Public Rights of Way and Open Access infrastructure including missing paths, signs, fences and gates etc.

c) Continue to implement wildflower planting within all open spaces including parks and gardens which can enhance biodiversity, taking into account resilience to climate change and the need for less intensive maintenance.

Food

Issues of concern and current position

Food is essential to our everyday lives, but the way the majority of our food is produced, processed, transported, sold, consumed and disposed of is damaging our health and the environment. Brighton & Hove households waste 39,000 tonnes of food each year (over 60% of which is avoidable food waste). It is estimated that more than 30,000 tonnes of food waste was disposed of by businesses in Brighton & Hove in 2012. 26% of the city's ecological footprint is related to food and obesity costs the NHS in Brighton & Hove £78.1 million pounds a year. With rising food and fuel prices, high housing costs alongside reductions in many people's income levels, food poverty is a concern (reference Chapter 6.4.6 of the Joint Strategic Needs Assessment for detail). Data related to premature deaths in England shows that Brighton & Hove ranks 98th worst out of 150 local authorities. Cancer, liver disease and heart disease are key contributors to premature death with poor diet and obesity a key factor in the cause of these deaths.

The current food system is unsustainable in the long term and many of the challenges we face as a city poverty, health inequalities, economic

development, climate change and waste have a food dimension. But food is also part of our city's identity, it plays an important part in our culture and often central to life's positive and enjoyable experience.

Our diets are influenced by many factors including culture, personal finances, knowledge and skills. The good news is that food that is good for the planet is often also good for us and making small changes to the way we eat – at home, in public institutions and when going out - can make a big difference.

Brighton & Hove is leading the way nationally in our approach of having a strategic framework for sustainable food work that unites different sectors via our Food Partnership.

What has happened over the last three years

- Spade to Spoon Digging Deeper, the refreshed food strategy, was adopted with cross-party political support in 2012
- Harvest Brighton & Hove a city wide project that encourages more food growing was awarded the Best Community Growing Project in 2013 from the Big Lottery's Local Food Fund. Harvest has helped 51 new community food growing spaces establish bringing the total to 76. Each year 4000 volunteers give 15,000 volunteer hours to food projects across the city
- The 64 primary schools in the council's school meals contract have achieved the Bronze Food for Life Catering Mark, use free range eggs, fair-trade produce and have Marine Stewardship Council certification for all of their fish served.
- A Good Food Procurement group has been established, bringing together the two universities, BHCC, Sussex Partnership NHS Foundation Trust and others together to work on good practice in this area. BHCC agreed to introduce minimum standards for food procurement across the Council.
- In just six months 223 tonnes of surplus food was redistributed by Fareshare providing food to residents in need and saving 91 tonnes of carbon dioxide from being released through disposal of food to landfill.
- 27 community composting projects have been established, involving 694 households and diverting 60 tonnes of food waste a year.
- A Planning Advice Note for Food Growing has led to 38% of residential development including proposals for food growing compared with <1% before.
- Brighton & Hove Food Partnership and the city's approach towards a healthy and sustainable food system was recognised by the Sustainable Food Cities Network as a national leader with the model now being adopted by other towns and cities across the country.
- The Sussex Partnership NHS Trust's demand for sustainable local food has helped to drive economic activity. For example their use of the local market garden supplier proved so successful that the supplier has seen its turnover increase by 30% over the last four years whilst the Trust has reduced its carbon footprint for food miles and waste. The

use of local suppliers has proved as cost effective as national suppliers.

Health

The Food Partnership's Healthy Choice Award for nurseries and playgroups means that over 2000 pre-school children a day now eat healthy meals and snacks. 4012 adults and 457 children have been directed to one of the healthy weight programmes or clinics via the Healthy Weight Referral service since its launch in 2009.

What we plan to do

- Achieve a National Sustainable Food Cities Gold Award by 2016. This is an independently assessed award which will require us to provide evidence of achieving significant measurable outcomes across 6 key areas related to healthy and sustainable food.
- Take Harvest Brighton & Hove to the next stage by introducing a programme to increase access to community food growing projects for people with complex needs and gather evidence of the impact on their health and wellbeing
- The re-opened Open Market on London Road to operate as a thriving local market and centre for community and cultural activity that welcomes a broad mix of people.
- Implement the recommendations of the city's new Allotment Strategy that emphasises sustainability to ensure that the city's allotment community thrives.
- Take both a strategic and frontline approach to tackling food poverty. Implement the six recommendations around food poverty from the JSNA including work to better understand the extent and impact of food poverty, to deliver work to prevent food poverty across age ranges and to provide a safety net of emergency food provision linked to advice.
- Deliver information and skills sessions across different communities in the city to promote and inspire people to choose healthy and sustainable food
- Work to reduce food waste, deliver a community based education and skills programme linked to national 'Love Food Hate Waste' campaign. Increase composting at home and in communities.
- All schools to take a whole school approach to food including offering opportunities to learn about food growing and cookery.
- Local food activity to be core component of the sustainable community-based and self sustaining estate at Stanmer Park.
- Develop local food promotional campaign aimed at tourists and conference visitors as part of 'Eco Tourism' offer
- Develop and adopt minimum buying standards for sustainable healthy food for council catering contracts
- Work towards a Brighton and Hove Food Charter for large caterers in the city