

## PART THREE – CORE POLICIES

3.1 This section of the Revised Preferred Options consists of our preferred approach to strategic policy issues such as housing, transport and shopping. Rather than arranged under the headings of the council's revised Sustainable Community Strategy as previously, these are listed from CP1- CP19.

### CP1 – Sustainable Buildings



#### Supporting Documents:

- Sustainable Community Strategy - 2006
- Sustainability Strategy - 2002
- Sustainable Building Design SPD - 2008
- Draft Nature Conservation in Development SPD - 2008
- Construction & Demolition Waste SPD - 2006
- Home Energy Efficiency Strategy - 2001
- Fuel Poverty Strategy - 2002
- Waste Local Plan - 2006
- Housing Strategy - 2004-2007 (being revised)
- Climate Change Action Plan - 2006
- Draft South East Plan - 2006
- PPS 1 (including Supplement - consultation), PPG 3, PPS 9, PPG 10, PPS 22, PPS 23, PPG 24
- Nottingham Declaration on Climate Change - 2000
- UK Microgeneration Strategy - 2006
- Air Quality Action Plan- 2007

#### Context

3.2 Globally, the rate that we are consuming natural resources and altering the environment is unprecedented. Studies have shown that in UK consumption equates on average to 5.4 global hectares (gha) per person (a sustainable level is suggested to be 1.8gha<sup>19</sup>). Resources are not only being used more quickly than they can be replenished, but potentially contributing to ecological degradation, loss of species, resource depletion and an increase in greenhouse gas emissions that contribute to climate change. A WWF report<sup>20</sup> on ecological footprinting revealed that Brighton & Hove performs particularly badly being ranked 57th out of the 60 cities featured in the study. This makes the city's footprint one of the worst in the UK requiring 3.47 planets or 6.25gha per person. As part of this, activities in Brighton & Hove emit about 1.373 million tonnes of CO<sub>2</sub> every year, with the domestic sector alone accounting for 48% of emissions (mostly from energy use). According to the Environment Agency the city is within a 'highly water stressed' region<sup>21</sup> with above regional average per capita consumption<sup>22</sup>. This is not

<sup>19</sup> 'The Ecological Footprint of Brighton & Hove' Stockholm Environmental Institute (SEI) January 2006. [www.sei.se/reap](http://www.sei.se/reap)

<sup>20</sup> 'Ecological footprint of British city residents' [http://www.wwf.org.uk/filelibrary/pdf/city\\_footprint2.pdf](http://www.wwf.org.uk/filelibrary/pdf/city_footprint2.pdf). Report commissioned by WWF and based on data collated by the Stockholm Environmental Institute (SEI) November 2007.

<sup>21</sup> Water stress is related to the amount of water available per person for a given area now and in the future. An area of serious water stress is defined as that where the current household demand for water is high in relation to current effective rainfall or future household demand is likely to be a high proportion of the effective rainfall available to meet demand. In areas of serious water stress, water abstraction is already close to or above acceptable limits.

<sup>22</sup> South East average 150 to 160 litres per person per day (l/p/d); Brighton & Hove's consumption is higher averaging 169 l/p/d (Audit Commission).

sustainable, but more relevantly, contrary to the Government's national commitment to sustainable development in general and cutting CO2 emissions by 20% by 2010 in particular.

**3.3** The production of long-lasting, accessible, healthy, resource-efficient buildings that are adaptable to changes in climate is a key aspect of Brighton & Hove's sustainable city agenda. On the one hand, this reflects the high profile sustainability issues have among city residents with 99% of City Views survey respondents having at least some awareness of the causes and effects of climate change. On the other, it reflects the challenges facing a compact seaside city constrained between the South Downs and the sea that, unlike other UK cities with a significant industrial legacy, vacant or derelict land, has very little scope for expansion.

**3.4** Current European, national and regional strategies and policies supporting the rise in building standards set ambitious targets for the city to deliver, particular when it comes to CO2 emissions reduction. However, the mechanisms put in place for delivering such targets tend to focus on large-scale residential new build. This poses additional challenges to Brighton & Hove as the city's development profile, while including some large scale new build, consists mainly of small- and medium-size developments affecting the existing stock.

#### Preferred Option - CP1 Sustainable Buildings

The council will require all development to deliver levels of building sustainability in advance of those set out nationally in order to avoid expansion of the city's ecological footprint and to mitigate against and adapt to climate change.

This will include requiring that:

1. all new residential development (including conversions) achieve zero carbon status<sup>23</sup> and the minimum standards as set out by the council in the Sustainable Building Design SPD;
2. all non-residential developments meet minimum BREEAM or equivalent standards set out in the council's Sustainable Building Design SPD; and
3. all development proposals (including conversions, extensions and changes of use) demonstrate how the development:
  - a) addresses climate change mitigation and adaptation;
  - b) avoids contributing to an increase in the city's current level of carbon emissions by delivering significant reductions in fuel use and greenhouse gas emissions via energy efficiency measures and incorporation of on-site low or zero carbon technologies;
  - c) aspires towards water neutrality<sup>24</sup> by meeting high water efficiency standards and incorporating new technologies to recycle, harvest and conserve water resources;
  - d) makes the most effective use of land;

<sup>23</sup> Carbon neutral development is one that achieves zero net carbon (CO2) emission from energy use on site, on an annual basis. That is, a development that does not contribute towards an increase in the city's current level of CO2 emissions.

<sup>24</sup> According to SEERA's 'Sustainability Appraisal Sounding Board' water neutrality is where 'for every new development, total water use ... after the development [is] equal to or less than total water use ... before the development'.

- e) protects occupant health and the wider environment by making the best of site orientation and building form and layout via the use natural light and ventilation, landscaping and materials;
- f) reduces 'heat island effect'<sup>25</sup> and surface water run-off;
- g) uses sustainable materials;
- h) enhances biodiversity;
- i) minimises waste and facilitates recycling, composting and re-use;
- j) reduces air and water pollution;
- k) maximises operational efficiency through ongoing evaluation and monitoring of building energy and water systems; and
- l) is adaptable to respond to changing needs.

In assessing the achievement of such standards the council will consider:

- i) site constraints;
- ii) technical viability
- iii) financial viability; and
- iv) delivery of additional benefits.

To assist developers, the council has produced a Sustainable Building Design SPD and a Sustainability Checklist setting out its aspirations, mechanisms and opportunities for minimum Government standards to be exceeded. Monitoring the effectiveness of the preferred option through the Annual Monitoring Report (AMR) will be used to inform the council of opportunities to exceed the requirements set out through parts 1 to 4 through the Sustainable Building Design SPD and subsequent revisions.

### Supporting Text

3.5 The Local Development Framework for Brighton & Hove has a statutory duty to contribute towards the achievement of sustainable development. The Government's 2007 Climate Change Bill sets out legally binding targets to reduce carbon dioxide (CO<sub>2</sub>) emissions by at least 26-32% by 2020 and 60% by 2050 against 1990 levels. PPS1 Creating Sustainable Communities urges local planning authorities to deliver sustainable development via high quality inclusive design and sustainable, durable, adaptable, resource efficient developments. More recent Government publications including the Supplement to PPS1 on Climate Change and Building a Greener Future: Towards Zero Carbon Development pave the way for the delivery of more resource-efficient buildings in general and 'zero carbon homes' by 2016 in particular. To support the delivery of such targets and aspirations, the Government introduced the Code for Sustainable Homes, which sets nationwide minimum standards for building design and set progressive rise in standards for Building Regulations<sup>26</sup>.

<sup>25</sup> On hot days urban areas can have temperatures 20 to 60% higher than the surrounding countryside. This is due to a phenomenon called the urban heat island effect that causes air temperatures in large cities to be warmer than in neighbouring suburbs and rural areas. Warmer air temperatures can impact on air quality, public health and the demand for energy.

<sup>26</sup> 25% improvement by 2010; 44% by 2013; and zero carbon by 2016; Building a Greener Future

**3.6** However, current national and regional drivers for deliver of sustainable buildings in general and the production of zero carbon homes in particular tend to focus on large scale, new build developments (although some recent documents suggest this is changing<sup>27</sup>). The challenges facing the city are significant given it's compact urban form with a lack of large brownfield sites and a unique development profile with a large contribution of new dwellings arising from schemes of 9 units or less, conversions or changes of uses; the older age private sector housing stock in relation to other cities in the UK<sup>28</sup>; the fact that 17.4% of its built up area is within conservation areas; and its limited capacity to generate energy from renewable sources on a large-scale<sup>29</sup>.

**3.7** In this context, focusing only on new build and the development areas will not be enough for a city seeking to avoid expansion of its ecological footprint in general and deliver local<sup>30</sup>, regional<sup>31</sup> and national CO2 reduction and low and zero carbon energy generation targets. Building on Local Plan Policy SU2<sup>32</sup>, Brighton & Hove has already innovated in this area having delivered since 2002 three 'zero carbon', highly resource-efficient developments (Brighton Earthship community centre<sup>33</sup>, a 16-unit housing and the 172-unit One Planet Living residential and mixed-use development<sup>34</sup>). Additionally, since 2006, a standard planning condition has been attached to applications for new development in the city requiring these to achieve at least BREEAM/EcoHomes 'very good' rating (equivalent to those of level 3 of the Code for Sustainable Homes). The council is committed to build on this work by promoting, at any point in time, the best possible standards of sustainable building design, construction, management and decommissioning in new and existing developments.

**3.8** Despite Brighton & Hove's achievements, the delivery of zero carbon development by 2016 is far from straightforward. Information on technologies and methods of assessment of building performance as well as minimum UK building standards<sup>35</sup> is fast changing. The council recognises the limitations of setting targets and minimum standards in a strategic document such as the Core Strategy. Hence, a more flexible option that will enable for standards to be more responsive to changing conditions in the city within the overall commitment to delivering levels of building sustainability in advance of those set out nationally is proposed. That is, for standards to be set and

<sup>27</sup> See Sustainable Buildings: The Challenge of Existing Stock – a technical working paper and Report on carbon reductions in new non-domestic buildings.

<sup>28</sup> Since 2001, the share of new build homes coming through the planning system each year is considerably lower (0.3%) than the national average (1%); and roughly half of housing completions involved developments containing 9 residential units or less and/or resulted from conversions and changes of use. The proportion of stock built before 1919 and during the inter-war period is 43% for England and 69% for Brighton & Hove (Brighton & Hove House Condition Survey July 2001 using data from the English House Condition Survey '96).

<sup>29</sup> An advisory panel for the LDF advising on opportunities for incorporation of LZC technologies in the city in 2006 concluded that Shoreham Harbour and Brighton Marina were the only areas with potential.

<sup>30</sup> 2020 Community Strategy target is to reduce emissions in the city by 3.5% per annum, 2006 - 2020.

<sup>31</sup> Draft South East Plan policies EN3 and EN4 set regional targets for energy generation from renewable sources and from land-based renewable energy respectively.

<sup>32</sup> Efficiency of development in use of energy, water and minerals.

<sup>33</sup> Planning application number BH2001/00481 - the first zero carbon development in the city

<sup>34</sup> Planning applications BH2007/00469 and BH2006/01761, respectively.

<sup>35</sup> Recently the Code for Sustainable Homes has replaced EcoHomes and future developments suggest this Code might be expanded to include commercial buildings. The Government has already set a path towards delivery of zero carbon homes by 2016 and is consulting on ways to reduce water use. Over time other issues such as materials may rise in priority. Emerging methods of assessing the performance of the built environment, such as BREEAM XB, may also become more prominent over time as policy focus shifts from new build to existing stock.

tested via the Sustainable Building Design SPD. The Brighton & Hove Sustainability Checklist, which supports this SPD, and the council's housing delivery monitoring enables for sustainability features and impact upon economic viability in developments coming through the planning system to be monitored and assessed. Together these monitoring tools provide a reliable evidence base to guide future policy revision.

### **Implementation**

**3.9** The policy will be implemented through the Sustainable Building Design SPD, Nature Conservation and Development SPD, Developers Contributions SPD and other relevant SPDs as well as through DC processes. Monitoring requirements will be set out in Part 4.