

7 The Code for Sustainable Homes

7.1 Policy for Delivering Sustainable Buildings

The PPS1 Supplement on Planning and Climate Change states:

“when proposing any local requirement for sustainable buildings planning authorities should specify the requirement in terms of achievement of nationally described sustainable buildings standards, for example in the case of housing proposals to be delivered at a specific level of the Code for Sustainable Homes”.

In addition, the draft PPS proposes a policy (LCF9) which further supports the use of the Code for Sustainable Homes.

This requirement for policies on sustainable buildings is reflected in one of the objectives for this study, which is to advise on potential policies for inclusion in the Core Strategy, set in the context of future requirements of the Code for Sustainable Homes (Code).

The Code is owned and managed by the Department of Communities and Local Government (CLG). It should be noted that although widely used, BREEAM is not a government adopted national standard for measuring sustainability of buildings. Since it is owned and managed by BRE Global, a private organisation. We have therefore placed the main focus of this chapter on the achievability and viability of the Code.

Since the PPS1 Supplement was published in 2007, there has been further consultation on plans for a staged introduction of a zero carbon requirement for new homes and non-residential buildings in 2016 and 2019 respectively, through Part L of the Building Regulations. The energy and CO₂ emissions requirements of the higher levels of the Code have been superseded by future proposals for the Building Regulations. Future policy options for Hertfordshire’s LPAs, including targets for emissions reductions and contribution required from renewable or low carbon energy generation, have therefore been established with reference to the latest proposals for the Building Regulations.

Nevertheless, it could still be beneficial to use the Code, and potentially BREEAM, as the basis for planning policies and targets for new development:

1. Requiring developments to achieve a minimum Code level or BREEAM rating would improve the overall environmental performance of new development in the district/borough.
2. In terms of the requirements of the PPS1 Supplement, it would go some way towards addressing the potential future impacts of climate change, as it would set standards in terms of water consumption, flood risk management and ecology, amongst other issues.
3. The Department of Communities and Local Government has indicated that Code is playing a significant role in gearing up the house building industry and supply chain to the zero carbon homes policy due to come into effect in 2016.
4. Code and BREEAM provide an established framework for assessing and certifying the performance of a development. A Code or BREEAM certificate can be used to demonstrate compliance with policy, reducing

the burden on development control officers to assess technical planning submissions and provide assurance that planning requirements are being met by new developments in practice. Many LPAs across England have already adopted Code as a standard for enforcing sustainable design in new residential development through policy.

7.2 The Use of the Code in Planning Submissions

Where a developer is required to achieve a Code level rating (e.g. in order to access public funding or to comply with planning policy), a licensed assessor organisation will usually be contracted to provide design advice, as well as act as the formal assessor during the Code ‘Design Stage’ and ‘Post Construction Stage’.

Code assessments are normally carried out in two formal stages:

- Design Stage (DS) – leading to an Interim Certificate. Under the Code, this stage is voluntary but highly recommended. The aim of the DS is to assess detailed design specifications for each dwelling to determine the interim rating. The DS should be carried out before construction begins i.e. RIBA stages A-G⁴⁶, however in reality some DS assessments will be carried out at any point up until the construction is complete (RIBA Stage K).
- Post Construction Stage (PCS) – leading to the Final Certificate. Under the Code, this stage is mandatory. The aim of the PCS is to assess each individual dwelling ‘As Built’ to determine the final score for the dwelling and its final Code level rating. The PCS assessment must be carried out after construction of the individual dwelling is complete, but before its occupation.

The assessment process for the DS and PCS is very similar. Evidence is collated and used as the basis for the assessor to determine how many credits are to be awarded for each issue. A summary report is submitted to the Code service provider (BRE or Stroma) for quality assurance and certification.

To enable the Code to be considered in the design of a dwelling as early on as possible, most assessor organisations now offer a third, initial stage known as a preliminary, or ‘pre’, assessment. The assessor organisation will work closely with the design team to identify the credit issues that will be appropriate to the dwelling/s and ensure sufficient credits are targeted to achieve the desired level rating. The pre-assessment offers the developer benefit in terms of cost planning and provides reassurance that the required Code level can be achieved. For the design team, the pre-assessment enables early action and design inclusion, which will reduce the likelihood of design iterations at a later stage which can be both time consuming and costly.

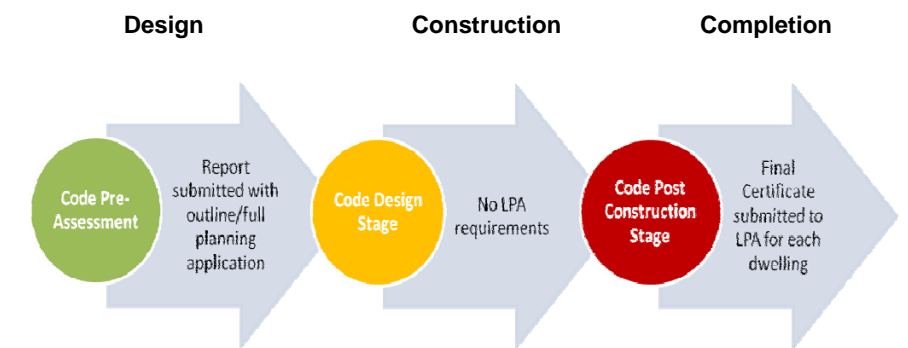
The pre-assessment is usually carried out at RIBA Stage C or D and can be submitted with the planning application to demonstrate to the local planning authority how the proposed development intends to achieve the required level rating. Indeed, many LPA Code policies state that a pre-assessment is required at the planning submission stage as evidence that the required Code level has been targeted. It would generally be unreasonable for a LPA to request a DS Interim Certificate with the planning submission since it is usually too early on in the

⁴⁶ Royal Institute of Architects Outline Plan of Works

development process for a DS assessment to have been carried out (the DS process, plus certification, can take up to a minimum of 8 weeks to carry out which would seriously impact upon the development programme).

A planning condition is usually attached that Final Certificates for each dwelling being assessed must be presented once construction is complete and prior to occupation. If the certificate shows that the required Code level hasn’t been achieved for a dwelling/s, this could be viewed as a breach of the planning condition and would be dealt with at the discretion of the LPA.

An example of how the Code could be applied to the planning application process is provided below:



7.3 Achievability of the Code

Where LPAs choose to adopt the Code as a policy standard for achieving sustainable buildings local characteristics and circumstances may need to be considered as to their impact on a development’s ability to achieve credits. Indeed, PPS1 recommends that developments are assessed on a site-by-site basis when standards on sustainable design and construction are to be applied, to ensure viability. The Code sections that may give rise to potential issues of viability are discussed below:

7.3.1 Water use

Targets are set for average water consumption per building occupant. As a mandatory standard, Code levels 3 and 4 require a water use rate of no higher than 105 litres per person per day. This can be achieved by specifying water efficient sanitaryware and appliances (where applicable), without the need for a water reuse system, such as rainwater or greywater recycling. The higher levels of the Code (5 and 6) require water consumption of no more than 80 litres per person per day to be demonstrated. This rate is more challenging to achieve and would require some form of rainwater harvesting or greywater reuse on site. Costs of these are dependent on the scale of system, with individual house costs quoted at £2,650 but reducing to £800 for communal systems in flats. Communal systems can act as sustainable drainage systems (SUDS), for example, by holding and therefore slowing down the speed at which storm water enters the drainage system.

It should be noted that Part G of the Building Regulations has been amended to include a provision for water efficient installations to limit internal water consumption to 125 l/p/d. This rate applies to all domestic developments across England and Wales. However, as Figure 7.1 demonstrates, regions experience varying levels of annual average rainfall putting some regions at a

higher risk of water shortages than others. Figure 7.1 shows that in 2009 the East of England experienced low average rainfall compared to many other regions. This is consistent with previous yearly rainfall records for the East of England.

Through the East of England Regional Assembly's (EERA) monitoring framework water consumption will be monitored against a target for domestic consumption of 105 litres/ person/ day (i.e. Levels 3 and 4 of the Code). This would equate to savings in water use of at least 25% in new development, compared with 2006 levels. This issue is supported through the East of England Plan (Policy WAT1).

Since it is possible to achieve this rate without incurring the expense of a water reuse system, LPA's would likely have sufficient justification in requiring through policy that development achieves a maximum water use rate of 105 l/p/d, or Code level 3 / 4.

Whilst the possible highest standards in water efficiency should be encouraged through policy (i.e. encouraging developers to achieve 80 l/p/d, equating to Code levels 5 and 6) an evidence base to demonstrate that water shortages in the County support and justify the additional expense that would be incurred may be necessary for any policy requiring these higher levels.

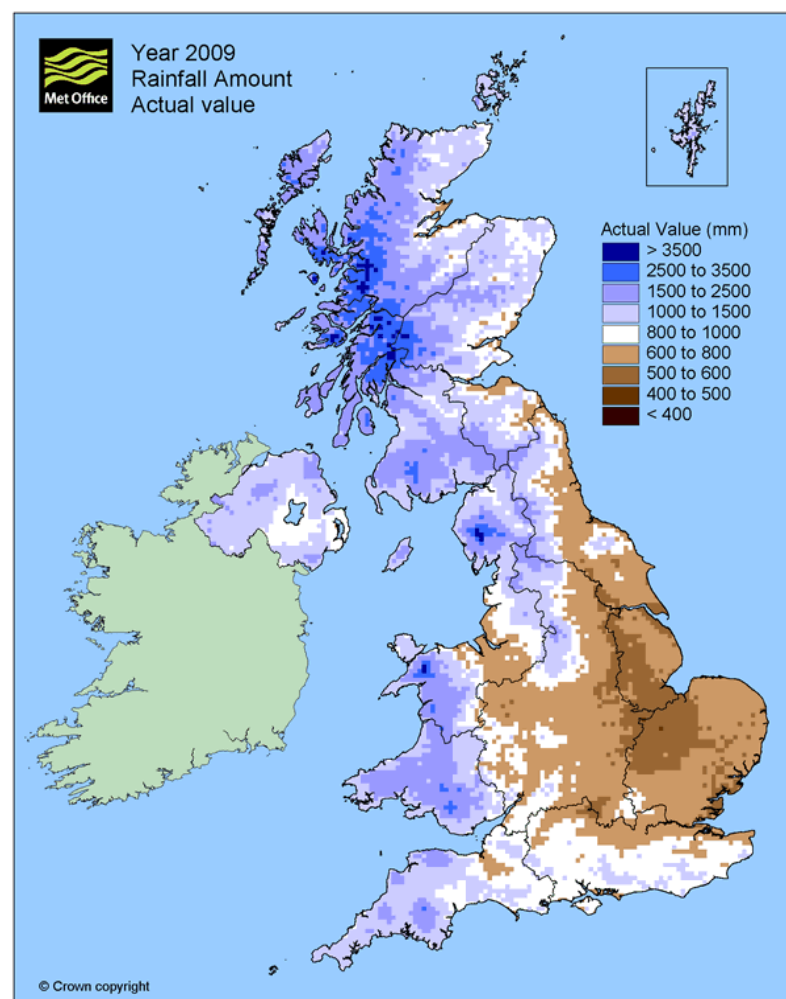


Figure 7.1: Annual average rainfall in the UK for 2009, the Met Office.

7.3.2 Flood risk

There are credits available in the Code for using sustainable drainage systems (SUDS) to reduce flood risk and the risk of groundwater contamination. Approximate costs for SUDs on individual homes are approximately £450 (based on one infiltration swale for every 2 units). The costs of incorporating flood resilience measures and materials on the ground floor of a 2 bed mid terraced house are around £17,000. If standard infiltration techniques cannot be used due to ground conditions, additional costs may be incurred for attenuation measures such as permeable surfaces and/or rainwater harvesting. Other Code credits are available for building in a low flood risk area, or where flood resilience measures are incorporated into design in medium or high flood risk areas. Targeting these credits is not mandatory but is recommended when taking into account the long term vulnerability of buildings to the effects of climate change in flood risk areas. It should be noted that developments in any medium and high flood risk zones in the County may be limited in their potential to achieve these credits.

7.3.3 Ecology

Non-mandatory credits are available in the Code to protect ecological features and where possible enhance a site's ecological value. Although LPAs are generally resistant to developing Greenfield / greenbelt land, stringent housing provision targets may mean that some future Greenfield / greenbelt development in Hertfordshire is likely. It should be noted that developments in these locations may be less able to achieve credits in this section of the Code.

7.3.4 Waste and recycling:

The Code has a mandatory requirement for all developments to implement a Site Waste Management Plan that monitors and reports on waste generated on site in defined waste groups, complies with legal requirements and includes the setting of targets to promote resource efficiency in accordance with guidance from WRAP, Envirowise, BRE and DEFRA. This is now a legal requirement for all construction projects over £300,000 in value so will be achieved by the majority of developments. Additional credits are available in the Code for including procedures and commitments to reduce waste and divert waste from landfill, according to best practice. Ability to achieve these credits will depend to some extent on local municipal waste management services.

7.3.5 Energy

The credits within the 'Energy and CO₂' section of the Code are often regarded by developers as the most challenging to achieve, in terms of design and cost. However, this section is also fundamental in optimising CO₂ emission reductions by reducing the overall carbon footprint of the development, and helping to achieve the national timetable for reducing carbon emissions from domestic buildings (a requirement of the PPS1 Supplement).

The Code mandatory credit ENE1 "Dwelling Emission Rate" is aligned with Building Regulations Part L and the trajectory towards 'zero carbon' homes. This is set out in Table 7.1 opposite.

Part L of the Building Regulations is due to change in 2010 and developments will need to achieve an improved dwelling emission rate to that of a 2006 Building Regulations compliant building. In effect, this change will see development needing to achieve Code level 3 of the energy section in order to comply with Building Regulations. It may be appropriate therefore for LPA policy to require a standard to be met in order to encourage development to go beyond Building Regulations in terms of reducing CO₂ emissions. This is supported by the PPS1 Supplement which states "There will be situations where it could be appropriate for planning authorities to anticipate levels of building sustainability in advance of those set out nationally."

Code Level	Percentage improvement over 2006 Part L	When change to regulations takes place
1	10%	
2	18%	
3	25%	2010
4	44%	2013
5	100% (regulated emissions only)	
6	Net Zero Carbon (includes unregulated energy i.e. appliances, etc)	2016

Table 7.1: Part L trajectory towards zero carbon, with corresponding Code levels

7.3.6 Remaining sections

Other sections of the Code, including management, health & wellbeing, and materials depend more on the design and construction of the proposed development, or the specific constraints of a given site. It has been assumed that since the majority of these credits are tradable and can be targeted at the discretion of the developer, sufficient credits can be sought in order to for a development to achieve a Code rating.

7.4 Testing Policy on Code Energy Targets

In Chapter 8 of this report we have used notional development case studies (based on actual developments coming forward in Hertfordshire) to model and test potential policies relating to the Code that could be considered by Hertfordshire LPAs. Based on a 2011 scenario (allowing for a one year lag time from 2010), we have looked at advancing the introduction of the Code by one level over Building Regulations Part L (i.e. Code level 4) naming this "Code+1", and by two levels (i.e. Code level 5) or "Code+2". We have not tested Code level 3 since from the end of 2010 the energy requirements of Code level 3 will be aligned with Part L and will therefore become a legal requirement for all development.

The outputs and conclusions from the policy testing will assist in identifying if it would be appropriate and viable to enforce a specific Code level rating and what the uplift to 2016 (zero carbon homes) could be. This could then form part or all of a policy requirement aimed at achieving sustainable buildings in Hertfordshire.

The Code+1 and Code+2 policy tests are discussed in Chapter 8, whilst the results and conclusions are presented in Chapter 9. The findings from this analysis, together with the discussion in this chapter, will assist in determining whether

applying Code standards in policy is viable, and if so, what the minimum standard and uplift should be.

7.5 Key Conclusions on the Technical Viability of Achieving Code

Based on the above technical discussion, and not yet accounting for the policy testing, it would be a practical option for Hertfordshire LPAs to adopt the Code as a method in which to achieve sustainable buildings, as required by the PPS Supplement. The most challenging credits for a developer would be those for internal water use. However, it is considered that a maximum use rate of 105 l/p/d can be achieved without major cost implications. In terms of consideration for reducing environmental impacts and resource pressure, it could be argued that a policy limiting water use rates should be applied to new development due to water resource constraints in the East of England.

The majority of the other credits are tradable, i.e. voluntary, so it would be the responsibility of the developer and design team to determine the appropriate credits to target in order to score sufficient points to achieve the desired Code level. The PPS1 Supplement supports LPAs in setting standards in advance of those set nationally where local circumstances warrant and allow this. Given the increasing pressure on water resources in the region it would be reasonably justified therefore for a minimum Code rating of Level 3 or 4 (both require a mandatory maximum rate of 105 l/p/d) to be applied to new residential development through planning policy.

It should be noted however, that it may not be appropriate to apply this policy to all developments. Minor residential schemes of less than 10 dwellings may be able to achieve credits under the water section, but be financially constrained in meeting other elements of the Code. It may therefore be appropriate to apply a threshold limitation and this could be better determined once the energy requirements of the Code have been tested (see Chapter 8). Additionally, some development may be physically constrained in their ability to achieve certain credits due to location, topography, etc and this would need to also be considered when setting standards on sustainability. In these circumstances, it may be appropriate to consider applications on a site by site basis.

In terms of BREEAM (the environmental assessment method for non-domestic buildings), the credits are similar to that of the Code. Indeed, the Code evolved from 'Ecohomes' which was formally the BREEAM assessment method for new domestic buildings. Ecohomes is still available but cannot be used to assess new buildings, only residential refurbishment projects. In regards to BREEAM ratings (given on a scale of Pass, Good, Very Good and Excellent) a rating of 'Very Good' is the most comparable with a Code rating of Level 3 to 4, and is often the minimum rating used by LPAs that have adopted BREEAM in policies for non-residential development and domestic refurbishments.

7.6 The Code and Associated Costs

In this section we have provided information relating to the costs associated to the Code for Sustainable Homes (current version). This research was conducted on behalf of CLG and published in March 2010. It should be noted however, that the Code is currently under review following a consultation and is therefore likely to change over the course of 2010. The energy section in particular will see significant amendments as it is aligned with Part L of the Building Regulations and

with the definition of zero carbon. Therefore the current cost review will only remain valid until the new version of the Code is published (anticipated in October 2010). An updated cost review will accompany the release of the updated Code and it is recommended that the data from this research eventually replaces the information in this section.

Additionally the current research does not take into account local factors such as land value, policy on S106 contributions, etc. We therefore encourage Hertfordshire LPAs to take these factors into consideration when addressing the costs associated with the different Code levels.

Data from the Code for Sustainable Homes Cost Review, March 2010⁴⁷ published by CLG has been used to show the financial implications of achieving different levels of the Code by different house types on different sites. Costs are those currently applicable to building to the existing version of the Code, with no assumptions regarding potential future revisions. The information in the section has been taken directly from the Cost Review.

The modelling methodology used by the Cost Review has been designed to identify the lowest cost means of achieving each Code level in each scenario (i.e. each combination of dwelling type and development scenario). This is achieved by first applying all measures required to achieve the mandatory standards (some of which are credited with points, others have no points attached) and then adding further measures in order of cost-effectiveness (i.e. £/point) until enough points have been scored to achieve a particular Code rating. The minimum costs associated with achieving each level of the Code are presented in Table 7.2 for each dwelling type and in a range of development scenarios. The costs are reported as the extra-over cost from a baseline of building a 2006 Building Regulation compliant dwelling.

There is significant variation in the extra-over costs at each Code Level between the dwelling types and across the development scenarios. Typically, however, the extra-over costs expressed as a percentage of base build cost are < 1% for Code level 1, 1–2% at Level 2, 3–4% at level 3, 6–8% at Level 4, 25–30% at Level 5 and anything from 30 to 40 % at Level 6.

The most critical factor in determining the total cost of building to the Code is the approach taken to meeting the mandatory reduction in carbon emissions. At the lower Code levels (up to Code level 3) fabric improvement measures may be sufficient to achieve the required reduction in Dwelling Emission Rate (note that calculation of Dwelling Emissions Rates have been performed using SAP 2005 which will be superseded by an updated version in October 2010). However, from Code level 4 and above it becomes necessary to employ some form of low or zero carbon technology to meet some or all of the dwelling's thermal and / or electrical demands. These costs tend to dominate the overall expense of meeting a given Code level for all dwelling types.

The variation in Code costs between development scenarios is largely a result of the variation in energy strategy costs, which can be dependent on the development's scale and density. This is particularly the case when the energy strategy is based around some common, site-wide infrastructure, such as a district heating system. Furthermore, development scale and / or density may restrict the technology options available. For example an attractive means of meeting the very high DER reductions required at Code Levels 5 and 6 can be to utilise a biomass CHP system connected to a district heating network but, due to current limitations

⁴⁷ <http://www.communities.gov.uk/publications/planningandbuilding/codecostreview>

on technology availability, a large heat load (i.e. a significant scale development) is required for this strategy to be available. Limited availability of biomass CHP technology at smaller scales and the constraints on installation of medium to large-scale wind turbines in many development sites mean that the Code Level 6 energy strategy is very challenging.

Extra-over costs (E/O) costs are measured from a baseline of constructing a 2006 Building Regulation compliant dwelling and are tabulated as an absolute cost and as a % increase over the base build cost. The table opposite (Table 7.2) summarises extra-over costs of building to each level of the Code in each of the dwelling types and for a range of development scenarios.

7.7 Future Code

The Code will be revised this year in order to align it with changes to Part L and other regulations and standards, and to incorporate the definition of zero carbon homes and the new energy efficiency standard. The proposed revisions being put forward were recently consulted on and it is anticipated that a revised version of the Code will be published towards the end of 2010. The proposals focus mainly on the energy section and issues regarding Lifetime Homes, inclusive design and sustainable drainage. A cost review will be conducted to take account of the changes as a result of the consultation.

As discussed previously, credit Ene1, which addresses CO₂ emission reductions, is aligned with Part L of the Building Regulations and mirrors the trajectory towards zero carbon homes in 2016. This means that in 2016 Code level 6 will be mandatory, but only in terms of credit Ene1. Subsequently, although all homes will need to be zero carbon, they won't necessarily have to achieve a Code Level 6 certificate, because most of the other credits in Code will still be voluntary. Therefore planning still has a role to play in requiring developments to achieve a Code level 6 certificate to ensure that sustainability is addressed in a holistic way and not just through energy.

CLG is currently considering the role of the Code energy section come 2016 through work on 'future thinking'.

7.8 BREEAM and Associated Costs

Figure 7.6 shows the percentage increase on the base build cost to deliver 'Good', 'Very Good' and 'Excellent' ratings under BREEAM Offices (2004) and BREEAM Schools. ^{48, 49} The cost analysis shows that the 'Very Good' level of BREEAM is achievable with a small increase to build costs, while the costs associated with BREEAM 'excellent' are much more significant.

We are not aware of any published cost data on meeting BREEAM office targets since 2004, certainly none is yet available showing the costs of delivering BREEAM Offices 2008, which contains a number of fairly significant changes, compared with earlier BREEAM versions.

Code Level	2b-Flat		2b-Terrace		3b-Semi		4b-Detached	
	E/O cost	%	E/O cost	%	E/O cost	%	E/O cost	%
Small brownfield (20 dwellings at 80 dph)								
1	£310	0.5%	£230	0.3%	£360	0.4%	£310	0.3%
2	£1,670	2.8%	£1,620	1.9%	£1,040	1.1%	£970	1.0%
3	£2,460	4.1%	£2,420	2.8%	£3,020	3.2%	£2,680	2.7%
4	£5,610	9.4%	£7,360	8.5%	£8,140	8.7%	£6,030	6.0%
5	£17,740	29.7%	£24,370	28.2%	£26,830	28.6%	£30,130	30.1%
6	£28,510	47.7%	£34,810	40.3%	£38,730	41.2%	£42,770	42.8%
Medium Urban (350 dwellings at 80 dph)								
1	£260	0.4%	£170	0.2%	£260	0.3%	£270	0.3%
2	£1,560	2.6%	£1,500	1.7%	£990	0.9%	£810	0.8%
3	£2,340	3.9%	£2,000	2.3%	£2,900	3.1%	£2,510	2.5%
4	£5,440	9.1%	£7,190	8.3%	£7,970	8.5%	£5,860	5.9%
5	£17,570	29.4%	£24,200	28.0%	£26,650	28.4%	£29,960	30.0%
6	£19,580	32.8%	£26,550	30.7%	£28,390	30.2%	£31,230	31.2%
Large Urban (3600 dwellings at 80 dph)								
1	£250	0.4%	£160	0.2%	£250	0.3%	£260	0.3%
2	£1,550	2.6%	£1,490	1.7%	£990	0.9%	£810	0.8%
3	£2,340	3.9%	£2,000	2.3%	£2,890	3.1%	£2,510	2.5%
4	£6,360	10.6%	£6,200	7.2%	£6,580	7.0%	£6,470	6.5%
5	£16,640	27.9%	£23,210	26.8%	£25,580	27.2%	£28,790	28.8%
6	£23,210	38.9%	£29,920	34.6%	£32,390	34.5%	£36,040	36.0%
Small greenfield (10 dwellings at 40dph)								
1	£320	0.5%	£230	0.3%	£330	0.4%	£320	0.3%
2	£1,620	2.7%	£1,560	1.8%	£990	1.1%	£880	0.9%
3	£2,160	3.6%	£2,120	2.5%	£2,720	2.9%	£2,380	2.4%
4	£5,350	9.0%	£7,150	8.3%	£7,860	8.4%	£6,910	6.9%
5	£17,310	29.0%	£26,970	31.2%	£29,260	31.1%	£32,270	32.3%
6	£27,650	46.3%	£37,400	43.3%	£40,800	43.4%	£45,230	45.2%
Medium edge of town (650 dwellings at 40 dph)								
1	£270	0.5%	£190	0.2%	£370	0.4%	£290	0.3%
2	£1,550	2.6%	£1,500	1.7%	£920	1.0%	£810	0.8%
3	£2,090	3.5%	£2,050	2.4%	£2,650	2.8%	£2,310	2.3%
4	£5,260	8.8%	£7,080	8.2%	£7,800	8.3%	£6,840	6.8%
5	£17,240	28.9%	£26,900	31.1%	£29,190	31.1%	£32,200	32.2%
6	£24,080	40.3%	£31,250	36.1%	£33,090	35.2%	£36,180	36.2%
Large edge of town (3,300 dwellings at 40 dph)								
1	£270	0.5%	£180	0.2%	£370	0.4%	£290	0.3%
2	£1,550	2.6%	£1,490	1.7%	£920	1.0%	£810	0.8%
3	£2,090	3.5%	£2,050	2.4%	£2,640	2.8%	£2,310	2.3%
4	£5,280	8.8%	£7,080	8.2%	£7,790	8.3%	£6,830	6.8%
5	£17,230	28.8%	£26,890	31.1%	£29,190	31.1%	£32,200	32.2%
6	£27,710	46.4%	£34,620	40.0%	£37,090	39.5%	£40,990	41.0%

Table 7.2: Summary of E/O costs of building to each level of the Code (*The Code for Sustainable Homes - Cost Review, CLG, March 2010*)

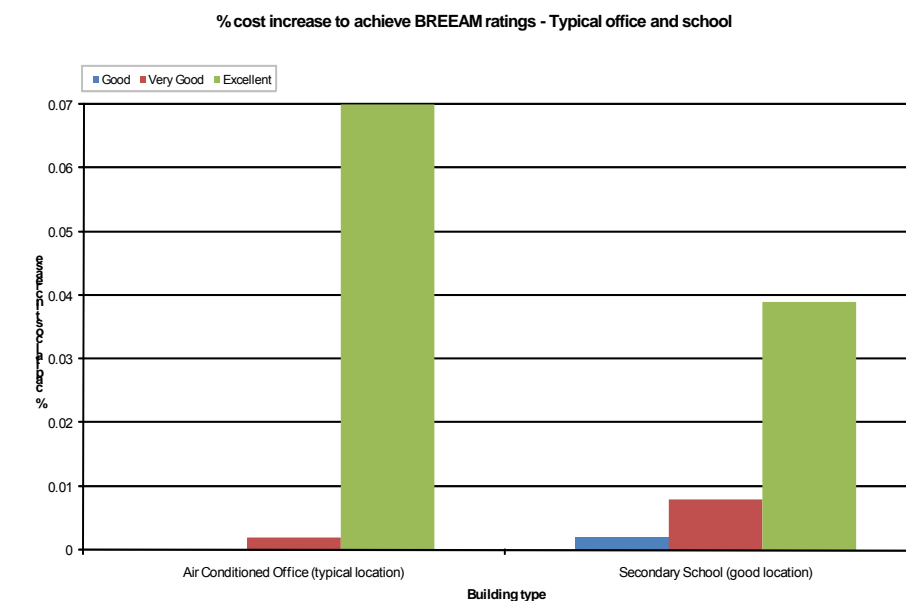


Figure 7.6: Costs (over base construction cost) for delivering BREEAM Offices (2004) and BREEAM schools ratings. (Source: Putting a price on sustainable schools (BRE Trust and Faithful & Gould, 2008))

7.9 Key Considerations Emerging from this Chapter

There are a number of key considerations that have emerged from assessing the technical (and to some extent the financial) viability of adopting Code as a policy standard. Setting requirements through policy for the use of Code (and potentially BREEAM) would:

- Meet the objectives of PPS Planning and Climate Change in terms of local requirements for sustainable buildings
- Improve the overall environmental performance of new development providing both environmental and social benefits on a local and national scale
- Go some way towards addressing the potential future impacts of climate change through the reduction of CO₂ emissions and adaptation measures
- Support developers and the supply chain in gearing up to zero carbon
- Assist development control officers in assessing and validating compliance with policies and targets through the use of 3rd party certification

In addition:

- The Code Cost Review indicates that a significant proportion of the costs of delivering current Code levels arise in meeting the standards for energy and CO₂ emissions.
- The Code is under review and the energy section is likely to change significantly. The costs associated with the updated energy section are

⁴⁸ Putting a price on sustainability (BRE Trust and Cyril Sweett, 2005)

⁴⁹ Putting a price on sustainable schools (BRE Trust and Faithful & Gould, 2008)

still to be determined. However there is unlikely to be any major changes to other sections of the Code.

- The Code level 3 mandatory 25% Dwelling Emission Rate (DER) improvement is due to become a legal requirement through Building Regulations from the end of 2010 and therefore should not be considered as an additional build cost.
- There is a jump in cost when moving from Code Level 4 to Code Level 5 due to the associated improvement to the DER, but also the need for water re-use and recycling systems to achieve the 80 l/p/d maximum water use rate.
- Although it could be reasonably justified for an LPA to require a Code rating of Level 3 or 4, and potentially a BREEAM rating of 'Very Good' for non-domestic development, a development's ability to deliver this rating may need to be assessed on a case by case basis, taking into account the physical site constraints which may affect achievement of some credits.
- Come 2016, planning will still have a role to play in requiring developments to consider and achieve sustainable buildings in a holistic way and not just through zero carbon.