

BUILDING A GREENER FUTURE: TOWARDS ZERO CARBON DEVELOPMENT
RESPONSE TO THE CONSULTATION BY
THE LONDON FORUM OF AMENITY AND CIVIC SOCIETIES

The London Forum of Amenity and Civic Societies ('the London Forum') is the umbrella organisation for some 130 residents, tenants, conservation, civic and community organisations and other affiliated bodies in Greater London, with an aggregate membership of over 110,000.

We welcome the opportunity to comment on the consultation document *Building a greener future: towards zero carbon development*. As requested we have set out our views as responses to the questions listed in Annex A to the consultation document. We have also submitted comments separately on the draft Planning Policy Statement on Planning and Climate Change.

Q1 *Are we right about the need for new housing to lead the way in delivering low-carbon and zero-carbon housing, and is it achievable in the timescale we have set out?*

The London Forum agrees that climate change is the most fundamental threat facing the world today and that urgent action by all countries is required to limit its extent. As energy use in the home, especially for space and water heating, accounts for a substantial proportion of the energy used in Britain, this is clearly an essential arena for taking action to reduce carbon dioxide emissions. While action will have to be taken across the entire domestic sector, new housing offers much wider scope for technological innovation, and in principle designing new housing from the start to achieve a much higher level of energy performance will be more straightforward and more cost-effective than modification and retrofitting of existing housing.

The projected large increase in the number of homes, as a result of increases in population and the number of households, will in itself tend to increase energy demand. That makes it all the more important new homes should be built to the highest standards of energy performance that are practically achievable.

We note the estimate that by 2050 as much as a third of the housing stock will have been built since 2006. We also note that the proposals in this consultation document would achieve only a quarter of the reduction calculated to be necessary in the carbon dioxide emissions from the domestic sector, if that sector were to be required to make a proportionate contribution to achieving the UK's target of a 60% reduction in total carbon dioxide emissions by 2050 (a target which is now widely seen as not demanding enough in the light of the latest scientific evidence on climate change). This suggests it will eventually be necessary to move beyond the zero-carbon level of performance to the zero-energy level.

The government's target that by 2016 all new homes must be zero-carbon is a very ambitious one. We support that ambition. But achieving it successfully will require

considerable and sustained efforts by both government and industry. We identify here some aspects which we believe require particular attention.

Experience with industrialised building in the 1960s shows that the rapid and widespread introduction of new building techniques can have unsatisfactory outcomes. Requiring new homes to be built to low-carbon or zero-carbon standards would not achieve its objective if the homes in question had to be replaced or rebuilt after a relatively short time because technical defects had become apparent – replacement or rebuilding would in themselves give rise to significant carbon dioxide emissions.

We have an anxiety in this context about the proposal (2.31) that publicly funded housing should be required to achieve Level 3 of the Code for Sustainable Homes before that becomes compulsory for all housing. While we appreciate that this could have an important demonstration value, we urge that new approaches should not be imposed on publicly funded housing before there is full confidence in the designs and techniques to be used.

The effective life of new homes will depend, not only on the adequacy of the techniques used in their construction, but also on their attractiveness to occupiers and the quality of environment they provide. Space standards are important, and whether the sizes of units match the demands (for example, from families with children); in London a combination of planning policies and market factors has led to an excessive emphasis on provision of small or very small dwellings. Some aspects of the quality of life provided by housing developments are captured in the Code for Sustainable Homes, though not as compulsory elements. But wider aspects are also important, including not only the availability of community facilities but also their quality. In short, the sustainability of new homes will not depend only on their energy performance but also on the appropriateness and effectiveness of general planning policies.

There is concern about the effectiveness with which Building Regulations are enforced in practice, for example the crucial requirement about airtightness. We hope the system will be subjected to a critical review to identify how deficiencies in its administration can best be overcome, and that appropriate reforms will then be made.

However thoroughly Building Regulations are enforced there would still be uncertainty about the extent to which the rated energy performance of new homes, and therefore the projected benefit in reduced carbon dioxide emissions, will actually be achieved in practice. One issue is whether the people in those homes will behave in ways the designers assumed (see our response to Q3 below). Another issue is whether they will want to extend or modify their homes at a later date, and what effects that will have (see our response to Q5 below).

Q2 Have we got the assessment of costs and benefits right?

In broad terms, yes.

Q3 *Have we got the balance right between the contribution of the planning system and that of Building Regulations? Are there other policy instruments we should consider? Are there ways in which we can design our policy instruments to achieve the same goals more cost-effectively?*

The Code for Sustainable Homes is itself another, complementary policy instrument which seeks to stimulate voluntary initiatives by developers and builders ahead of the introduction of mandatory provisions, and to mobilise customer pressure in support of that. We consider it important that the programme to achieve zero-carbon new homes by 2016 should be underpinned by government support for research to make possible rigorous assessments of the energy performance of homes in use, by educational campaigns to raise awareness of relevant behavioural issues among the people living in low-carbon or zero-carbon homes, and by attractive terms and conditions for customers who both import electricity from and export electricity to the grid. A wide range of other policy instruments will have to be employed to improve considerably the energy performance of the existing housing stock.

Q4 *Are there significant solutions to climate change that our policy framework does not encourage and are there other things we should be doing to address this?*

While we support the proposals for homes, we are concerned that equal priority should be given to reducing the similarly substantial use of energy in other types of building. Use of electricity in the commercial sector, for example, has been growing rapidly, may not be constrained in practice by cost pressure, and is often manifestly wasteful (for example, round the clock internal illumination of office buildings, or loss of heated or cooled air through shop doorways). The need for customised solutions for other types of building represents both a challenge and an opportunity.

Q5 *Are we right in our assessment of what we should seek to achieve through the planning system and through Building Regulations? Are there other policy instruments we should consider?*

We endorse the basic distinction between the role of the Building Regulations (2.51) in regulating the energy performance of buildings (and the linked role of the Code in anticipating future changes in Building Regulations) and the role of local planning authorities in regulating the provision of low-carbon and renewable sources of energy (2.55). However, we also see a role for the planning system in helping to ensure that homes built to low-carbon or zero-carbon standards are not subsequently altered or extended in ways that significantly reduce their energy performance. In this respect we see the planning system as a necessary complement to the application of the Building Regulations to home extensions. This consideration should be given full weight in decisions about the scope of permitted development rights.

In regulating the provision of low-carbon and renewable sources of energy local authorities should be able to take account of local differences in circumstances. But they should also be given policy and technical guidance on the appropriateness of

particular low-carbon and renewable technologies in various situations. For example, small wind turbines fixed to houses are likely to be relatively inefficient in generating electricity. And, if the houses in question are listed as being of architectural or historic interest, or are in a Conservation Area, there might also be a disfiguring effect on the urban landscape. Assuming the location is a good one for wind power, it is likely to be much more effective to erect a large wind turbine to serve a group of houses.

The second part of Q5 overlaps with Q3, to which we have responded above.

Q6 *Are there areas of duplicative – or even conflicting – regulation in the framework that we have described? Do these threaten to get in the way of meeting the goals we have set?*

The government's proposals will reduce considerably the confusion that has existed about the respective roles of Building Regulations and the planning system, and about different standards for energy performance of buildings. We are not aware of any duplication or conflicts that would exist if the government's current proposals are put into effect.

Q7 *Do you agree that all new homes should receive a rating against the standards set out in the Code for Sustainable Homes should be mandatory from April 2008?*

Yes. New homes will in any case require an Energy Performance Certificate in order to comply with the European Energy Performance in Buildings Directive. It is desirable that, as well as energy performance, assessment should cover other aspects of sustainability, as the Code does.

Q8 *Do you believe that our timetable for delivering zero-carbon development through more stringent Building Regulations is sensible and achievable, too stringent, or not stringent enough?*

We are keen to see rapid progress, subject to the general provisos already made in response to Q1. The construction industry should be put under pressure to establish the necessary supply chains and train or retrain the labour force. A point of concern is the heavy reliance seemingly being placed on the installation of micro combined heat and power units in individual homes. Despite the potential advantages of this type of equipment there is evidence the technologies have not yet been developed to the point where their general use is practicable and acceptable. As well as the size of units their noise levels in operation have caused problems. We believe several companies have withdrawn from the field. At best it may take time to refine the technology and demonstrate its success in widespread use.

Q9 *Do you think our assessment of the costs of achieving these targets is realistic? Can you offer additional supporting evidence on costs?*

The London Forum does not have any information of its own to provide under this heading.

Q10 *We believe that a zero carbon target is the most robust framework for reducing the carbon footprint of new development. Do you agree that our definition of zero carbon in paragraph 2.33 is the right approach? Where there are circumstances in which the additionality of offsetting measures outside the development can be demonstrated and are more cost-effective (e.g. on small infill developments), is there a case for carbon neutrality (i.e. taking account of offsetting measures)?*

We endorse assessment of zero-carbon status over a period of a year and the inclusion in the assessment of all energy use in the home, including electricity for appliances and home entertainment.

We would not want to discourage small infill developments, provided they are sustainable in other respects (for example, by not being cramped or at an excessive density or leading to a loss of open space). However, we are sceptical about allowing developers of infill sites to claim credit for offsetting measures. Given the ambitious general standards now proposed, there will be little if any scope for a developer to offer as an offsetting measure more stringent than normal standards in a development on another site, even if he has other sites. It would be difficult to verify and police the validity and additionality of other types of offsetting measure, such as planting trees or constructing freestanding renewable energy installations. Instead, we urge higher costs should be regarded as acceptable for achieving low-carbon or zero-carbon status in small infill developments; and the government should fund research to develop and demonstrate techniques applicable to such developments.

Q11 *Does the framework that we describe give adequate room to authorities and developers to make best use of the opportunities available at different spatial levels, for example district heating and district cooling?*

No. Some technologies, such as district heating and cooling, have to be applied over a very wide area in order to achieve the full technical and economic benefits. There are likely to be very few individual developments of sufficient size. There needs to be a stronger planning framework which encourages and enables local authorities to draw up and implement masterplans for extensive areas, covering energy infrastructure along with other essential, but often at present neglected, elements such as community facilities and public open space. There also needs to be a review of the adequacy of the powers available to require developers to connect to existing or proposed district heating or cooling systems.

Q12 *Do you agree that, for the reasons set out, there should be a national strategy for regulating the emissions from buildings supported by local promotion of renewable and low carbon energy supply?*

Yes.

Q13 *Are we right to assume that our twin goals – of delivering the new homes that are needed and reducing emissions from the housing stock – will be achieved more effectively by relying on national standards (i.e. Building Regulations and the Code) than through encouraging earlier action by individual local authorities?*

Yes, provided the national standards are securely based and (where they are mandatory) properly enforced, and provided also they do not stifle innovations that can pave the way for subsequent general adoption of superior technologies.

Q14 *Given that the proposed PPS on climate change will apply in England but not in Wales, are there any specific implications in Wales for the future direction of Building Regulations implied by this consultation?*

This question is outside the London Forum's terms of reference.

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