

Environmental challenges – working draft

Introduction

The Government and the GLA have highlighted the need to for Local Authorities to tackle the challenges of reducing carbon emissions and designing places that allow comfortable and healthy living into the future. From reducing the carbon emissions from buildings to helping ensure wildlife can move between habitats, planning policies can ensure development makes a full contribution to these important issues.

The Government's overarching guide on planning policy – the National Planning Policy Framework (NPPF) – emphasises the importance of planning for changing environments stating that Local Planning Authorities should:

- adopt proactive strategies to mitigate and adapt to a changing climate
- actively support energy efficiency improvements to existing buildings,
- maximise renewable energy and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily
- consider identifying suitable sites for renewable and low carbon energy sources
- support community led initiatives for renewable and low carbon energy
- take full account of flood risk and water supply and demand issues, changes to biodiversity and landscape.

The London Plan 2011 states that all development should make the fullest contribution to the reduction of carbon emissions and Local Planning Authorities should include detailed policies and proposals in their LDFs/ Local Plans.

Reducing carbon emissions

Vision

In 2030, Bromley's new development not only reflects and enhances local character, but also helps reduce carbon emissions and other environmental impacts. The energy efficiency of existing buildings is being improved through high quality refurbishment and low carbon and renewable energy sources are in widespread use.

Policy objectives

The London Plan (2011) sets high expectations for larger developments to contribute to carbon reduction. While all development must adhere to the energy efficiency standards of the building regulations, the London Plan states that in the Capital,

As well as the overall reduction, developments should look at the feasibility of incorporating renewable energy into the scheme, with an expectation that this would account for 20% of the carbon reduction. There are some occasions where both heat and power can be supplied from a low or zero carbon source on site, or from an existing network nearby. The London Plan expects developers to assess whether this kind of decentralised energy network might be appropriate to their proposal.

Boroughs should develop more detailed policies and proposals to support the development of renewable energy and in particular, to identify broad areas where specific renewable technologies are appropriate.

The Area Action Plan for Bromley Town centre already incorporates policies which were based on the London Plan 2008. It is likely that, due to the potential scale of development, there are more opportunities for carbon reduction, local energy networking and the production of renewable energy on some of the sites in the town centre.

Strategic Options

The broad objective is to ensure that new development reduces potential carbon dioxide emissions through its design, materials and use of low carbon energy sources.

1. What level of carbon reduction do we expect development to achieve?

Currently, Bromley uses the policies in the London Plan which require residential developments of 10 units or more and other developments of 1000sqm or more to reduce their carbon emissions by 25% more than the Building Regulations. This reduction increases over time, until developments are considered “zero carbon” – by 2016 for homes and 2019 for other developments. Whilst keeping in general conformity with the London Plan, it would be possible for the Borough to develop more detailed or localised policy on carbon reduction in new development. A technical study would need to show what is likely to be feasible and financially viable in a range of development scenarios to provide evidence for such a localised policy (and policy areas 2 and below).

Option 1A – PREFERRED - Major developments should achieve the minimum standards set out in the London Plan

or

Option 1B – Local standards should be developed which respond to Bromley’s particular local circumstances

2. To what type and size of development should this carbon reduction apply?

In some cases, major developments are able to achieve the minimum target whilst in other cases it is not practically feasible. The policy takes account of feasibility and viability issues and these must be tackled on an individual basis. It is likely that additional (i.e. greater than the building regulations) carbon reductions are possible in some non-major developments and again, this could be determined on a case-by-case basis. Where it is not practically possible to make reductions on-site, the London Plan suggests that a local policy may require an in-lieu payment. This would necessitate the development of project(s) to which the payment could be made, possibly through a local CIL scheme.

Option 2A – All new development should be screened for the feasibility and viability of additional carbon reductions above the level set in Building Regulations

or

Option 2B – PREFERRED - Major developments (10 units residential, 1000sqm non-residential or mixed use) should aim to achieve a minimum additional carbon reduction in line with the London Plan policy.

Option 2C – Where additional carbon reduction is not possible on site, an in-lieu payment should be made towards carbon reduction off site.

3. How should the development of local energy networks (decentralised energy schemes) be encouraged?

Local energy networks can be a very efficient way of generating and electricity and heat. Normally, large power stations lose the heat produced from the production of power but on a smaller scale this can be redirected through a network. Although the Borough does not have

the extensive local energy networks as in the denser parts of London, there are some existing small schemes and these periodically require refurbishment, upgrading or may be subject to redevelopment. Where development occurs and the proposed uses, or those nearby, indicate that a local energy network may be feasible, a new network could be established to provide more efficient and lower carbon energy and heat for that development and its neighbours. Where other smaller scale development occurs, it may be possible for it to connect to an existing network. The London Plan requires boroughs to help identify and establish decentralised energy network opportunities. Work has already taken place in the form of a “heat map” of the Borough which will help guide future development.

Option 3A – PREFERRED - All new development should investigate whether it can connect to an existing, local energy network.

Option 3B – PREFERRED - All major development should investigate the feasibility of establishing a new energy network or connect to and expand an existing network.

4. How can renewable energy be incorporated into new development?

Use of renewable energy provides a significant opportunity to reduce carbon emissions and increase energy security. It can give householders and businesses the opportunity to reduce energy bills and can provide local employment opportunities. It is usually most effective and financially viable to design the production of renewable energy into a development from the outset so it is an important inclusion in a planning application. The London Plan sets a presumption that all major developments seek to reduce carbon emissions by 20% by including on-site renewable energy generation wherever feasible. Bromley has been applying the Mayor’s policy on renewable energy successfully on major developments across the Borough. A range of solutions have been adopted including both electricity and hot water producing panels, biomass powered boilers and heat pumps in the ground or air. When considered from the outset of a development proposal, these technologies have been successfully incorporated into the overall design without any additional impacts on the visual amenity.

Option 4A – PREFERRED - All major developments should include renewable energy generation on-site to account for a minimum of 20% of the total carbon reduction.

Option 4B – Where major developments cannot practically include renewable energy on-site, a contribution should be made towards an agreed scheme of production off-site.

Development Management policies

The determination of planning applications for development will require a set of policies relating to the Borough’s expectations for carbon reduction and design of buildings. Considering the strategic options, it is likely that these policies would include the following:

- Submission of information about sustainable design and construction with a planning application (investigation of the use of the Code for Sustainable Homes)
- Submission of an energy assessment and strategy with a planning application
- Use of green roofs and walls
- Consideration of decentralised energy networks for electricity, heating and cooling
- Requirements for renewable energy
- Off-site contributions where requirements cannot be met on site
- Retrofitting of existing buildings to reduce carbon emissions where opportunities arise
- Stand-alone large scale renewable installations
- Recycling of materials
- Control of the use of external cladding for increasing energy efficiency

Adapting to a changing environment

Vision

New developments incorporate a range of measures to improve their environmental performance and ensure the long term comfort of their users.

More trees, green spaces and living roofs and walls help keep our local environment pleasant and comfortable and create new habitats, increasing biodiversity and allowing the movement of plants and animals between larger areas of natural environment.

Conservation measures in new and refurbished businesses and homes are helping reduce the demand for water.

Fewer buildings and people are affected by flooding. More rainwater is temporarily stored or reused and new development incorporates more effective drainage systems which helps relieve existing flood risk.

Policy objectives

A key role of planning is to ensure that new development and refurbishments are designed to be adaptable to environmental changes and provide a stable and healthy environment for occupants. Whilst doing this, it should also be able to offer improvements to the existing natural environment by restoring and enhancing habitats around it and allowing wildlife to move between habitats successfully. The London Plan encourages developments to make the fullest contribution to a sustainable future through their design, including measures to reduce overheating, including green infrastructure (trees, growing roofs and walls and other soft landscaping), and minimising water use.

Reducing flood risk, now and in the future, is another key issue supported by policies in both the NPPF and the London Plan. The Borough's Strategic Flood Risk Assessment (SFRA) and Preliminary Flood Risk Assessment (PFRA) identify areas most at risk from flooding in the Borough but it is important that proposed new development considers and reduces its impact on surface water through site specific Flood Risk Assessments. Where flooding is considered likely to occur it may be mitigated through the use of Sustainable Urban Drainage Systems (SUDS).

Strategic Options

5. Flood Risk Assessments

The requirement for site specific Flood Risk Assessments is set out in the NPPF and its Technical guide. They should be submitted with proposals larger than 1 ha in Flood Zone 1 (the zone least likely to flood), all proposals in Flood Zones 2 and 3, and also for those areas identified by the Environment Agency as Critical Drainage Areas. Flood risk may also occur in other situations but Risk Assessments are not mandatory in other locations.

Option 5A – PREFERRED - Flood Risk Assessments should be required in areas identified in the NPPF

and

Option 5B – PREFERRED - Critical Drainage Areas should be expanded to include locations with locally identified flood risk issues.

6. Sustainable Urban Drainage Systems

Planning policy must ensure that new inappropriate new developments are prevented in flood risk areas and that any proposed development is directed away from areas that are at higher risk. Where development is not inappropriate (i.e. it should not be in this location because of flood risk) a Flood Risk Assessment will show to what extent it may increase the risk of flooding. Solutions can then be found through the use of Sustainable Urban Drainage Systems (SUDS). These are site specific schemes to delay and reduce the amount of water leaving a site, involving “hard” engineering and/ or soft landscaping, with the ideal outcome of reducing run-off to the rate it would happen from an undeveloped greenfield location. The London Plan states that developments should use SUDS unless there are practical reasons for not doing so, and presents a “drainage hierarchy “ of the basic techniques that should be used from rainwater storage for later use (the most desirable) down to rainwater going straight into the sewer (the least desirable). Currently, technical advice on SUDS is available from the Environment Agency and the construction industry but the wide range of scenarios and solutions and can mean that in some cases the results are not well tailored to the site and are ineffective.

Option 6A – PREFERRED - Require SUDS to follow the London Plan drainage hierarchy and Environment Agency guidance

and

Option 6B – Require SUDS that accord with locally established criteria to improve their effectiveness.

Development Management Policies

- Reducing over-heating and the need for powered cooling
- Inclusion of soft landscaping, green roofs and walls in and around developments
- Use of shelters and shading in the public realm
- Conservation of habitats, biodiversity and wildlife corridors
- Development of new habitats
- Use of water saving measures in new development to meet maximum standards
- Requirement for Flood Risk Assessments
- Use of Sustainable Urban Drainage Schemes (SUDS)
- Use of local CIL to contribute to larger flood risk and surface water management schemes

Waste management

Vision

Less waste is produced in the Borough and more of the waste that used to end up in landfill is reused and recycled. New cleaner technologies are used to turn more of the remainder into a source of energy and/or heat.

Policy objectives

The continuing challenge to deal with the waste we produce can be tackled in a number of ways. Schemes to encourage people to reduce what they throw away and increase reuse and recycling can make a major contribution but space is still needed to deal with managing the remaining waste and disposing of it in the least environmentally damaging way, taking into account the impact of its transportation.

National planning guidance on waste is still contained in PPS10 (which has not been superseded by the NPPF and is to be updated in a forthcoming National Waste Strategy) the

focus of which is the waste hierarchy in which the most desirable option is to reduce waste, then reuse, recycle, produce energy from it and finally send it to landfill.

The London Plan upholds this hierarchy and encourages waste to be seen as a resource to be exploited for benefit rather than a problem. The options for dealing with waste are becoming more innovative and as more waste is separated at source it can be reused and recycled more effectively. Tackling biodegradable waste has become a key priority with a target of none of this waste going to landfill by 2031. Bromley has responded to this pressure in part by introducing a kitchen waste collection scheme. This has successfully increased recycling from 40% of household waste in 2009/10 to 50% in 2011/12.

In terms of land use, the London Plan focuses on increasing London's capacity for managing waste to increase self sufficiency and it recognises that there is need for flexibility in light of changing methods of waste management. Each London Borough must allocate sufficient land and identify existing waste management facilities to provide capacity to manage the tonnages of waste apportioned in the London Plan. Boroughs can pool apportionment requirements. Existing waste sites should be protected and used to the maximum, and if a site is lost an additional compensatory site provision will be required.

Currently, the municipal waste management sites within the Borough are Churchfields and Waldo Road Depots, with planning permission recently obtained by a third party for an anaerobic digester (fast, sealed composting unit) which the Borough intends to use for its kitchen waste scheme. Bromley is part of the South East London Waste Partnership group which have pooled their resources to meet the apportionment figures. This means that Bromley is able to use waste management facilities in other boroughs with extra capacity, and vice versa. This allows greater flexibility and helps reduce the need to send waste over long distances for treatment or disposal. The Borough will continue to resist where possible the need for Bromley to be a through-route for waste disposal. In order to show how the apportionment targets are being met, the group of Boroughs produce a frequently updated Technical Paper which shows the capacity of each site in their area and the overall tonnages against the Plan targets. On the basis of this arrangement, Bromley does not have need of further capacity to meet the current London Plan target.

Strategic options

7. Waste management capacity

The London Plan requires Boroughs to ensure that they retain and if possible increase their waste capacity. Currently, Bromley is meeting its requirements through pooling resources with other Boroughs and so the priority is to maintain its current facilities. It is acknowledged that there whilst there are benefits in having the Waldo Road Depot in its current location in terms of waste collection, it also has limitations. In a recent study, alternative sites were not found but should one come up in the future, relocation – which must retain all the efficiency benefits and capacity of the existing site – may be an option.

Option 7A - PREFERRED - Retain and designate all existing waste management sites

Option 7B – PREFERRED - Consider additional sites to increase capacity where feasible

Development Management policies

Existing waste management sites should be designated and retained
Where capacity is lost from a site it should be reprovided elsewhere
Where possible, construction materials should be recycled on site into new development
New development should include adequate space for collecting recyclables
Site waste management plans should be included in planning proposals
Recycling and reuse of aggregates
Reparation of aggregate sites

Pollution

Vision

Our urban and natural environments are clean and healthy for people and wildlife. Our air and water is better protected from pollution and contaminated land is brought back into use through remediation. Nuisance from noise, dust and light pollution is kept to a minimum.

Policy objectives

The London Plan recognises the importance of making the Capital a cleaner, healthier city and the Boroughs should have planning policies to help reduce pollutants and minimise public exposure.

Local Plans should include policies to help reduce particular air pollutants identified in the National Air Quality Strategy, reduce the adverse impact of noise and encourage the remediation of contaminated land

Development Management Policies

Requirement for air quality assessments
Proposals for potentially polluting development
Reparation of contaminated land
Control of noise pollution
Ventilation
Control of light pollution
Hazardous substances