# LOCAL PLAN REVIEW

## CLIMATE CHANGE, STANDARDS AND DESIGN

SUPPLEMENTARY PAPER

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MAIDSTONE Borough Council

# Contents

# 1. Introduction

1.1. In April 2019 Maidstone Borough Council approved a motion recognising global climate and biodiversity emergencies. Following this declaration, the Council developed a Biodiversity and Climate Change Strategy and Action Plan. These documents build on the council's commitment to embed the climate and biodiversity emergency strategies across the organisation.

1.2. This paper sets out the way in which policies within the Local Plan Review have sought to respond to national policy and the Council's Climate Change and Biodiversity Strategy, specifically in relation to the following themes: Reduction in CO2 Emissions; sustainable buildings and climate resilience; energy supply; sustainable transport and air quality; green-blue infrastructure; flooding; water supply and treatment; biodiversity and; housing standards. It sets out the rationale behind the policies and relevant evidence used to inform these.

# 2. Legislative and policy background

2.1. A detailed summary of the various acts and legislation setting out the Council's obligations in respect to climate change and biodiversity is provided in the Environment Topic Paper.

2.2. The Climate Change Act 2008 and (2050 Target Amendment) Order 2019 sets out the risks of climate change, objectives, and proposals and policies for meeting climate change. It places a requirement that the UK government by law has to reduce greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050. Additionally, the act introduced a system of carbon budgets. This is repeated in the Strategic Environmental Assessment (SEA) regulations which requires that planning policies are assessed for consistency with wider climate change objectives. A statutory duty is placed upon LPAs under Section 19(1A) of the Planning and Compulsory Purchase Act 2004, which obliges LPAs to include in their Local Plans 'policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigations of, and adaptation to, climate change'.

2.3. The Planning and Energy Act 2008 allows local planning authorities to set energy efficiency standards in development plan policies which exceed the energy efficiency requirements of the building regulations. Such policies must not be inconsistent with relevant national policies for England, however Section 43 of the 2015 Deregulation Act which removes the ability for LPA's to set their own energy efficiency standards however this hasn't yet been enacted.

2.4. The Environment Bill is currently undergoing reading in the House of Lords. Once enacted, this will see the introduction of a mandatory 10% net gain for biodiversity for new development, with a biodiversity value will be attributable to the development

## National Planning Policy Framework

2.5. Planning plays a fundamental and decisive role in helping to deliver carbon neutrality, and the National Planning Policy Framework (NPPF) embeds climate change and biodiversity at the heart of the planning system. Paragraph 153 requires plans to take a proactive approach and long-term view to mitigating and adapting to climate change. Paragraphs 154 sets out the key ways in which planning can contribute to the mitigation and adaptation to climate change, this includes: spatial distribution to avoid vulnerable areas and to reduce greenhouse emissions; and design interventions to make best use of orientation, siting, and technological opportunities. Paragraph 155 focusses on renewable energy and heat, and requires that plans seek opportunities for renewable energy, consider identifying suitable areas for renewable/low carbon energy, and identify opportunities for decentralised, renewable and low carbon energy supplies. Finally, at para 156 the NPPF requires local authorities to support community led renewable and low carbon initiatives.

2.6. Intrinsically linked to climate change, biodiversity has gained increasing prominence in recent years. The NPPF 2019 introduced a requirement for planning policies to minimise impacts on, and provide net gains for, biodiversity. Paragraph 174 requires that planning policies provide for net gains to biodiversity and paragraph 179 requires that plans promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

## Housing standards and design

2.7. The Nationally Prescribed Space Standards set out a range of space standards for new dwellings. These standards are not mandatory, and their inclusion in local plan policy must be justified.

2.8. The NPPF requires that good design is a key aspect of sustainable development and that design can help create better places to live and work. Paragraph 130 specifically requires that policies ensure that developments create places that are safe, inclusive and accessible and which promote health and wellbeing. In 2021 the NPPF introduced a requirement for local planning authorities to prepare design guides and codes consistent with the principals set out in the National Design Guide and National Model Design Code.

## Building control regulations

2.9. The role of planning in reducing and adapting to climate change and reducing and reversing biodiversity loss is supported by a range of other legislative and policy tools across overlapping and complimentary fields. Building Control Regulations cover a range of building standards, ranging from energy efficiency to water usage. This includes building regulations, through approved Document L which sets out the national requirements

for the conservation of fuel and power in new dwellings, as well as national climate change and biodiversity strategies.

## Planning Practice Guidance

### Climate change

2.10. Planning Practice guidance highlights the opportunities for the integration of climate change mitigation and adaptation into local plans. Such measures can include;

Mitigation:

- Reducing the need to travel and providing for sustainable transport
- Providing opportunities for renewable and low carbon energy technologies
- Providing opportunities for decentralised energy and heating
- Promoting low carbon design approaches to reduce energy consumption in buildings, such as passive solar design

Adaptation:

- Considering future climate risks when allocating development sites to ensure risks are understood over the development's lifetime
- Considering the impact of and promoting design responses to flood risk and coastal change for the lifetime of the development
- Considering availability of water and water infrastructure for the lifetime of the development and design responses to promote water efficiency and protect water quality
- Promoting adaptation approaches in design policies for developments and the public realm

### Biodiversity net gain

2.11. Guidance states that plans can be used to identify a suitable approach to biodiversity and wider environmental net gain, and that net gain compliments and works with the biodiversity mitigation hierarchy.

## Climate change and biodiversity strategy and action plan

2.12. Following the council declaration of a climate change and biodiversity emergency, MBC developed a climate change strategy which sets out the local context, key themes, and aims of the council. This strategy is supported by an action plan, and of relevance to planning are those listed in the table below:

| Theme | Aim | Action | Output | Outcome |
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|---|---|---|---|---|
| Transport | To support the shift from cars to active and mass transport and enable the transformation from fossil fuels to no tailpipe emissions. | To support the shift from cars to active and mass transport and enable the transformation from fossil fuels to no tailpipe emissions. | Draft Local Plan to: Establish policies that enable the infrastructure required for low carbon vehicles Ensure policies encourage and enable development proposals which give priority first to pedestrian and cycle movements, both within the scheme and with its surrounding areas; and second to facilitating high quality public transport connectivity. | Local Plan includes measures and actions that will help to achieve carbon neutrality by 2030. |
| Buildings | To support the change from heating and cooling buildings using fossil fuels to low carbon technology and reducing energy needs by increasing energy efficiency. | Investigate how to support low carbon heat networks. | Identify potential of low carbon networks. | Evidence base to support new direction in Local Plan Review. |
| Generating renewable energy | To take every opportunity to generate renewable energy across | Use Local Plan review to investigate how to encourage on-site renewables on all types of new developments. | Research produced for onsite renewable generation for all new development. | Foundations laid for setting out requirements for renewable energy generation on new developments in Local Plan. |

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| | the Borough | To take every opportunity to generate renewable energy across the Borough | Use Local Plan review to investigate how to encourage on-site renewables on all types of new developments. | Research produced for onsite renewable generation for all new development. |
| Adapting to climate change | To build resilient landscapes, communities, and services. | Provide policy on climate change adaptation in Local Plan review, including consideration of flooding, heat and drought. | Climate change adaptation is included as part of Local Plan review. | Local Plan review provides policy of climate change adaptation. |
| | | Ensure Local Plan review considers level of current and future flood risk and developments are planned accordingly. | Flood risks are explicitly considered in Local Plan review. | New developments will be directed away from areas of flood risk and required adaptation and mitigations measures will be put in place. |
| Enhance and increase biodiversity | To use every opportunity to protect, enhance and increase biodiversity in the borough. | Draft Local Plan to;<br>Require biodiversity net gain within the borough<br>Ensure Garden Communities are an exemplar for biodiversity and deliver semi natural open space<br>Increase tree coverage and other wildlife habitats to allow biodiversity in new developments<br>Ensure that sustainable urban drainage schemes maximise biodiversity potential. | Biodiversity net gain is built into all new developments, with focus of semi natural open spaces. | Biodiversity net gain is achieved, and tree cover increased. |

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| | | Work with Kent County Council to draft common position statement on biodiversity (including ensuring maintenance regimes which protect and enhance biodiversity). | Position statement drafted. | Higher standards of biodiversity achieve through enhanced collaboration. |

## 3. Evidence base

3.1. The NPPF Requires that policies in Local Plans be underpinned by robust evidence. Several sources, produced both nationally and locally, have helped to inform policies in the Local Plan review. This evidence is set out below.

### Reduction in CO2 Emissions, sustainable buildings and climate resilience

3.2. The Kent and Medway Energy and Low Emissions Strategy (2020) identifies a pathway to reduce greenhouse gas emissions, eliminate poor air quality, reduce fuel poverty, and promote the development of an affordable, clean and secure energy supply for Kent county. Whilst the strategy focusses on the actions available to Kent County, it nevertheless provides an important source of information and evidence that is relevant to Maidstone.

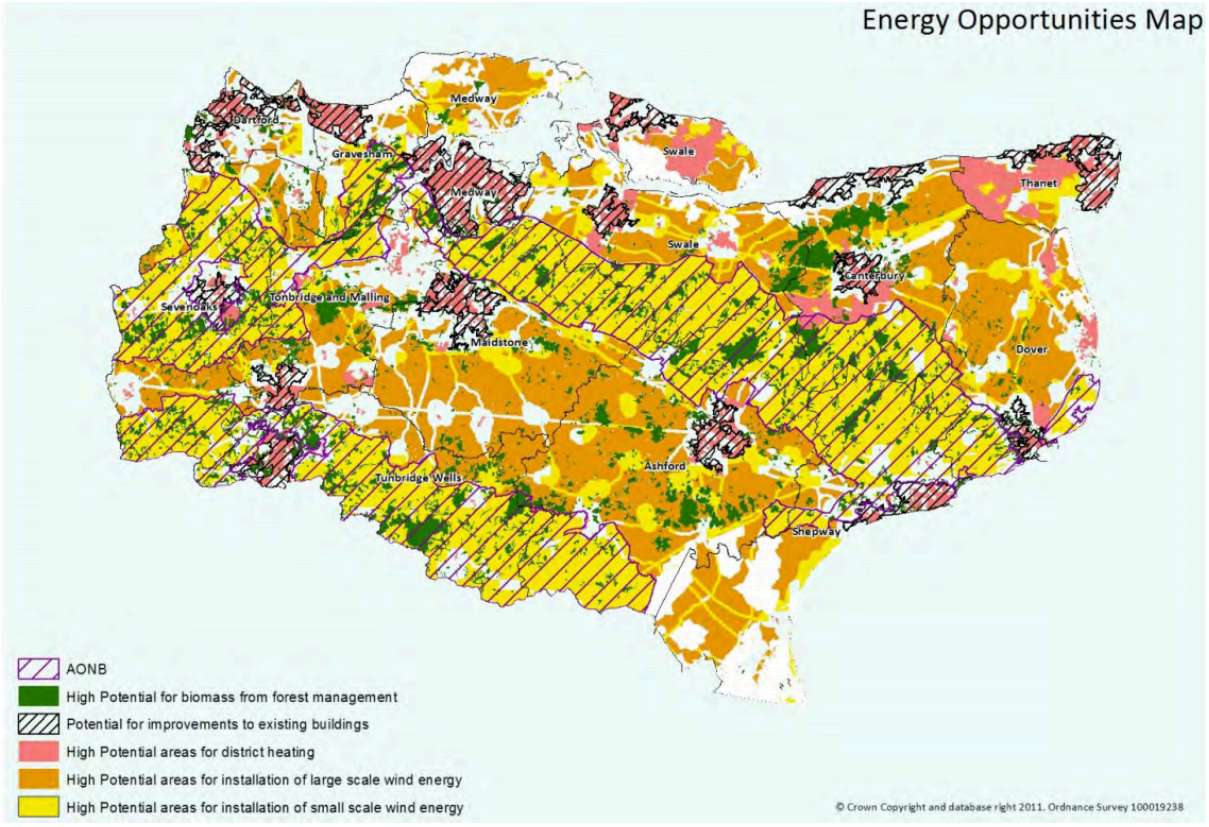
3.3. Approved Document Part L1A sets the standard for energy efficiency in new homes. There is limited locally specific evidence to identify the potential for higher standards of building energy efficiency, however policies within the pan have undergone viability testing.

3.4. The Climate Change Risk and Impact Assessment for Kent and Medway (CCRIA) was produced in 2019; it describes the changes Kent might face, and the potential risks to Kent's society, economy and environment. Part two of the summary of that summary provides an analysis of the risks and impacts in relation to people and the built environment. Key issues identified for Kent included: drought; flooding and coastal change; increased adverse weather events; increased temperature and; air quality. Kent was identified as being particularly at risk from all issues with the exception of coastal change for which it scored a 'medium'. The report further identified and high level of adaptation shortfall across overheating homes and public spaces, and declining air quality.

### Energy Supply

3.5. The Kent Renewable Energy Action Plan (Updated 2017) sets the Kent priorities for renewable as wind, biomass, micro-generation and district heating. The rural areas of Maidstone have high potential for the

installation of large scale wind energy, with smaller scale potential being higher to the south east of Maidstone. Central and north east Maidstone naturally offers the highest potential fir district heating, although this map doesn't take into account the potential generated by the critical mass achievable in new garden settlements.




*Source: Renewable Energy for Kent. Part 1: Overview and Action Plan*

## Sustainable Transport and Air Quality

3.6. The Local Plan Review is supported by a range of transport trelated evidence, including transport modelling as well as air quality assessments. Air quality impacts on specific ecological sites has been considered through the Habitats Regulation Assessment.

3.7. An Air Quality Management Area was declared in 2008 and the Air Quality Management Plan identifies measures and actions required to manage air quality within the AQMA and specifically the hotspot areas. The Maidstone Low Emissions Strategy (2017) seeks to help promote the update of electric vehicles, for example, by encouraging developers to build in EV charging points to new developments.

3.8. The Integrated Transport Strategy was adopted in 2016 along with the Walking and Cycling Srategy. The Integrated Transport Strategy has been updated alongside the Local Plan review, to take into account the latest transport modelling.

3.9. Further information on transport related matters and air quality is provided in the Transport and Air Quality Topic paper.

### Green and Blue Infrastructure

3.10. The Green and Blue Infrastructure Strategy for Maidstone sets out a visision for greener, healthier, attractive towns and villages. Mitigation of and adaptation to climate change forms a key objective of thr strategy, along with the promotion of sustainable transport, enhahcement of biodiversity, and the maintenance and enhancement of water and air quality.

3.11. The Kent Environment Strategy identifies the value of the environment to the economy and social wellbeing. It identifies four themes through which a range of organisations will provide support to decision makers in ensuring that Kent remains the highly desirable location of choice for visitors, residents and businesses.

### Flooding

3.12. The Strategic Flood Risk Assessment has considered the impact that the plan will have on flooding, both direct and indirect. This ensures that the sequential test is followed when setting out the strategy and allocations for the plan. However, notwithstanding the need for plans and projects to be subject to the sequential test, consideration should be given as to the ways in which development can actively improve current conditions. Consultation responses, particularly those from statutory consultees, have proved useful in guiding the council's response to flood risk and mitigation.

### Water Supply and Treatment

3.13. A range of evidence provides the justification for water supply and treatment interventions, this includes the Kent Water for Sustianable Growth study along with the Maidstone Water Cycle Study 2010; the Natural England advice letter and methodology in relation to the river Stour; Infrastructure capacity studies; the HRA and; the SA. Because of the significance of this theme, further evidence is set out in a separate water environment supporting document.

### Biodiversity

3.14. The Habitats Regulation Assessement (HRA) refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). In preparing the Local Plan review, a HRA has been undertaken.

3.15. The Kent Environment Strategy (2016) sets out the key environmental challenges within the county and identifies the desired outcomes and priorities for Kent County Council.

3.16. The Kent Biodiversity Strategy (2020-2045) sets out the contribution the county of Kent, and the Kent Nature Partnership, can make to the Government's ambition to improve the state of the environment and responds to the aspirations set out in its 25 Year Environment Plan. It translates the 25 Year Environment Plan to a local level and sets out ways in which biodiversity can be improved across the county through identifying key species and habitats and their target improvements.

3.17. Designations and frameworks can help to identify where and how green and blue infrastructure can contribute to the delivery of ecological enhancements, these include: internationally, nationally and locally designated sites of importance for biodiversity; local Biodiversity Action Plan habitats; and Ancient Woodland; Biodiversity Opportunity Areas and the emerging Nature Recovery Networks.

### Housing standards and design

3.18. Paragraph 130 of the NPPF states that local planning authorities should 'create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users'.

3.19. Some areas of the borough have the potential for the delivery of dwellings that are relatively small in size, in particular the town centre which has seen a rise in office to residential conversions and identified through the plan for significant regeneration. In 2018 MBC published Building For Life 12: Maidstone Edition. This document is intended to act as a tool to help structure discussions around new development which is centred around a series of questions. Question 12: External storage and amenity space, specifically relates to the need to provide adequate storage and amenity space in new dwellings.

3.20. In light of the town centre focus of the spatial strategy, new and emerging national policy surrounding the conversion of office and retail premises to residential, there is the potential to see a large number of higher density developments over the plan period. MBC is keen to ensure that the quality of homes and living environment of residents are of adequate standard where such developments are to be tested against policy. This is in accordance with the Council's Strategic Plan which aims to deliver 'safe and desirable homes that enable good health and wellbeing for our communities'.

## 4. Thematic assessments

4.1. The thematic assessments below detail a range of inputs under each climate change and biodiversity theme.

### Reduction in CO2 Emissions & Sustainable Buildings and climate resilience

4.2. The Climate Change and Biodiversity Strategy and Action plan provides a strong starting point through which climate change can be incorporated

into Local Plan Policies. Crucial in contributing to the delivery of carbon neutrality will be the sustainable siting of new housing, businesses and for infrastructure and this approach has been central to the strategic approach of the local Plan Review. This approach is supported by the accompanying non-spatial policies.

4.3. A range of measures can improve the energy efficiency and sustainability of buildings beyond the standard requirement set out in building regulations, including siting and design interventions. The Local Plan Review seeks to ensure that suitable measures are accommodated within the design of buildings in order to ensure that growth delivered through the plan is done so in a way that reduces its impact on the environment. Accordingly, policy LPRSP14(c) encourages the delivery of sustainable buildings and a reduction in CO2 emissions. Policy LPRSQ&D1 specifically addresses sustainable design, requiring a 'fabric first' approach, that non-residential development is built to BREEAM standards Very Good, and that buildings are orientated to maximise energy gains and mitigate against climate change.

## Energy Supply

4.4. This theme covers a range of interventions, from the development of large scale zero carbon schemes such as wind farms and solar arrays, through to local heat networks to on site micro generation and combined heat and power. Whilst the aim of Local Plan Review policies is to first reduce the ammount of energy consumed in new developments, MBC considersa that it should also look to develop policies to support or require the provision of zero or low carbon power generation.

4.5. MBC considered opportunities to *require* local low carbon district heat networks in large developments, however the *Renewable Energy for Kent. Part 1: Overview and Action Plan* indicated that this would likely only be viable in existing built up areas. The majority of the sites which are of a scale that could deliver district heating are located in the town centres, and therefore it would be more appropriate to bring such a requirement forward through future work on the town centre, where the individual viability of sites can be tested. Notwithstanding this, opportunities may arise for low carbon distriuct heat networks to be accommmodated in new development, and LPRINF provides support for such schemes. Additionally, policy LPRINF3 supports suitable renewable and low carbon energy schemes

4.6. Other types of renewable energy can be produced at various scales, from small scale providing energy for a single dwelling, to large scale solar arrays or wind farms. The Local Plan Review includes a requirement for the provision of 10% renewable in new development as a percentage of total consumption which is backed up by a requirement for new development to provide battery storage so as to ensure a greater resiliance for renewable energy supply.

## Sustainable Transport and Air Quality

4.7. Vehicle emissions are a major contributor to poor air quality at both the local level and on a wider global scale. AQMA and the Integrated Transport Strategy, aim to decrease vehicle emissions and increase air quality and aim to reduce the need to travel. This is reiterated in the Maidstone Low Emissions Strategy.

4.8. Reduction of vehicle emissions lies at the heart of the Local Plan Review, and accordingly, policies respond to this through a range of measures. Seeking greater connectivity for walking and cycling in terms wider networks can decrease the number of road journeys. Central to achieving this is a strategy of locating development in sustainable locations with good access to public transport infrastructure and services which the plan strategy seeks to achieve. Improvements to and addressing 'missing links' to encourage a modal shift are integeral to this and plan policies. Policy LPRSP12 (Sustainable Transport) commits to delivering this modal shift through, enhanced public transport and walking and cycling improvements.

4.9. Linking into issues surrounding low carbon infrastructure, policy LPRSP12 also supports the provision of Electric Vehicle Infrastructure. The provision of electric vehicle infrastructure is essential for the delivery of low carbon transportation and to meet the future needs of residents. In 2020, Ultra Low Emission Vehicles accounted for 8.5% of all vehicle sales, an increase of 125% on 2019 with year on year exponential growth[1], indicating that there is a significant upward trend in the number of Ultra Low Emission Vehicles sold as a percentage of overall car sales. The UK plan for tackling roadside nitrogen dioxide (2017)[2] sets out the Government's ambition to ban the sale of new conventional petrol and diesel cars and vans by 2040, and more recently the government has undertaken a consultation on bringing this requirement forward to 2035.

4.10. On the basis of the government's own projections and policies and the ambitions set ou in the Maidstone low Emissions Strategy, the plan includes a range of measures to ensure that provision for electric vehicle charging is adequate both now and for the expected lifetime of developments. Policy LPRTRA4 requires that all new development within the borough should make provision for Electric Vehicle charging. Given the lifetime of a new development and the need to meet future Electric Vehicle charging infrastructure demand, the policy additionally requires that this should be done at an appropriate level meet current requirements, whilst also being able to respond to increased future need and advances in technology.

[1] Department for Transport, (2020), Vehicle Licensing Statistics: Annual 2019

[2] Department for Environment Food and Rural Affairs & Department for Transport, (2017), UK plan for tackling roadside nitrogen dioxide concentrations; Detailed plan

## Green and Blue Infrastructure

4.11. Green and blue infrastructure can help to mitigate against the effects of climate change in a range of ways, from carbon sequestration, flood reduction, enhancing wildlife habitats and by having a cooling effect on urban heat islands. In addition, green infrastructure supports quality and life and is intrinsically linked to the health and wellbeing of the communities they serve. It can include a range of features, including parks and open space, landscape, woodland, and blue infrastructure.

4.12. There presents opportunities to incorporate a greater degree of cohesiveness between green blue infrastructure and biodiversity assets, whilst not compromising the deliverability of sites. The Maidstone Local Plan is suported by the Green Blue Infrastructure Strategy which provides a useful guide for new development. Policy LPRSP14(c) required the integration of blue-green infrastructure into qualifying development in order to mitigate urban heat islands, enhance biodiversity and to seek to deliver Sustainable Urban Drainage Systems. Accordingly, Policy LPRSP14 seeks to ensure that open space is considered as part of overall green blue infrastructure and that it works to deliver multiple benefits including recreation, landsacape improvements and increased biodiversity.

4.13. To improve the degree of tree cover, along with bat, invertibrates, bird and insect habitats, Policy LPRQ&D 1 requires that sites make provision for a range of species and provide native tree and grass as part of landscaping.

## Flooding

4.14. Controls on the location of development outside of Flood Zones is embedded in the NPPF. Therefore central to the decision making at strategic planning and development management stages is the sequential test to site selection which prioritises development on land outside Flood Zones 2 and 3. Flood mitigation is incorporated through the requirement to accommodate SUDS on site, which in turn are to contribute to green-blue infrastructure and biodiversity.

## Water Supply and Treatment

4.15. Maidstone has an extensive and varied water environment, including aquifers, rivers, lakes and ponds and future development will place additional burdens on water resources in the borough, through increased recreation and increased demand. Matters relating to water supply and treatment are more generally dealt with in a specific supplementary document to the Environment Topic Paper.

4.16. Tighter water usage standards can be imposed where there is a demonstrated need, such as where a local authority is located in an area of high-water supply stress. Evidence provided for in the Kent Water for Sustainable Growth study indicates that development arising from the Local Plan Review over the coming years must be built to a water

consumption standard of 110litres per person per day. This is reflected in policy LPRSP14(c).

### Biodiversity

4.17. Paragraph 178 of the NPPF requires new developent delivers Biodiversity Net Gain and it is expected that the required 10% net gain set out in the Environement Act will be rolled out nationally in the coming years.

4.18. The plan seeks to go beyond the requirement of the emerging Environment Act, by requiring a minimum of 20% on site Biodiversity Net Gain. Central to the delivery of any net gain is the contribution that this can make to existing habitate priorities, and accordingly the plan requires that such gain should have regard to Biodiversity Opporutnity Areas and Nature Recovery Networks. Delivery of 20% biodiversity Net Gain has been considered within the Sustainability Appraisal and Whole Plan Viability.

4.19. Protection of European, national and local designated sites is integral to the plan along with the restoration of important habitats (streams, ponds, meadows, heaths, etc.). Policy LPRSP14 has been informed by the Habitats Regulations Assessment of the plan and sets out the key mechanisms through which development can protect and/or enhance biodiversity assets.

### Housing standards and design

4.20. As highlighted earlier in this report, the focus of the spatial strategy will likely deliver higher density development in the town centre. Whilst national minimum space standards are an optional requirement, MBC considers that well-designed homes with adequate space, storage and outdoor space make a positive benefit to people's wellbeing, and this is embedded in the Council's Strategic Plan. To ensure that new housing in the borough is of adequate size, provides adequate storage, and provides suitable outdoor space to enable everyday functions such as drying clothes, policies LPRQ&D6 and LPRQ&D7 set minimum technical standards for properties and outdoor space requirements.

4.21. Policy LPRSP15 sets out the requirements for design, placing a specific emphasis on the need to create quality environments that not only deliverer a visually appealing environment, but also create high quality public environments. This will enable more active use of the public realm and will encourage sustainable modes of travel. Policy LPRSP15 will be supported by design guides and codes.

## 5. Conclusion

5.1. The plan has drawn from a range of available evidence to formulate and justify climate change and biodiversity related policies.

5.2. The requirements set out in the plan can also affect viability which in turn can impact on a developments ability to deliver critical infrastructure or affordable housing, and therefore policiy requirements in the plan have undergone whole plan viability testing to establish that the interventions as set ou will not impact on plan delivery.

5.3. The measures inforrporated into the plan seek to deliver a range of measures in line with the council's commitment to address the climate change and biodiversity emergencues, whilst at the same time complying with national legislation and policies.