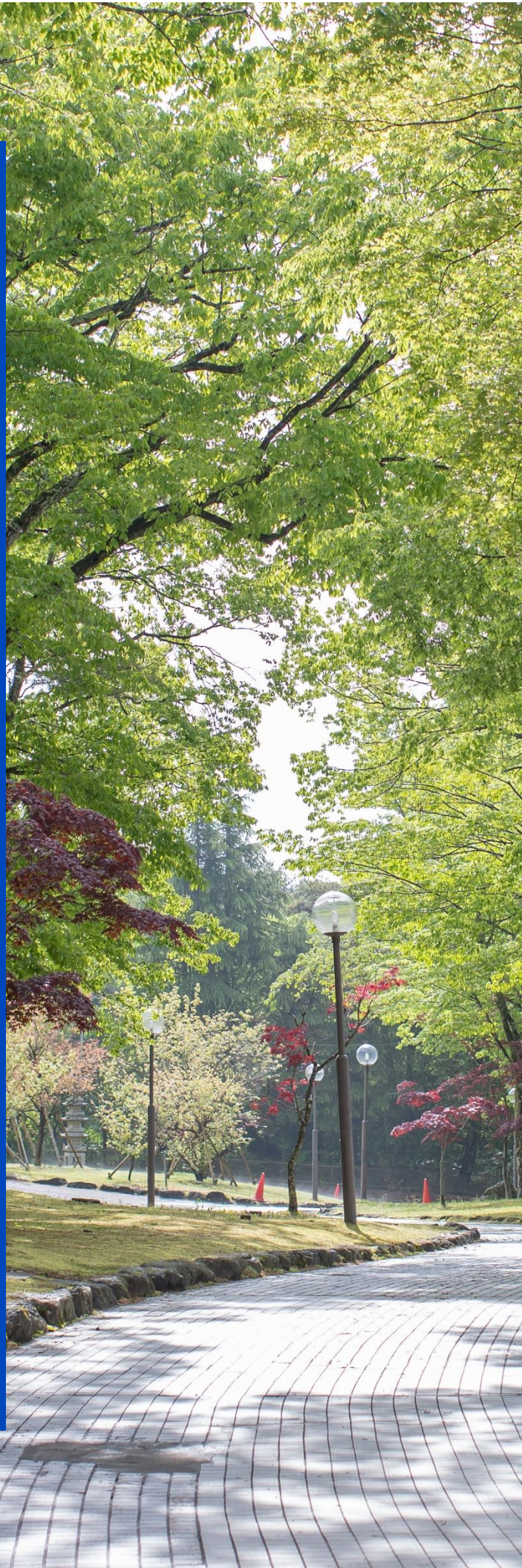


The Nature Recovery & Climate Resilience Playbook

Executive Summary

November 2022



Programme Partners:

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ARUP

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Acknowledgements

We are grateful for the input of many partner and supporter organisations in the production of this resource. This acknowledgement does not imply endorsement.

We would like to give special thanks to our peer-review group members and partners for their advice, review and contributions throughout the project.

Peer review group:

Vicky Payne & Helen Grimshaw, URBED; Patrick Little, CBRE; Tom Ash, WWT; Max Tolley, RTPI; Jayne Rodgers and Gloria Osei, Essex County Council; Sarah Luff, WSP/Norfolk County Council; Emma Davies, Greater Cambridge Shared Planning Service; Gemma Jerome, Building with Nature; Carl Bunnage, RSPB; Paul Shaffer, CIWEM; Kristen Guida, GLA; Owen Jenkins; Rebecca Lydon, Hydrock; Kathryn Brown, Wildlife Trusts; Rhodri Davies, ISG; Andy Sheppard; Arup.

Dedicated to the memory of Peter Box

i. Purpose

This resource is designed to help enable local, combined, and national authorities across the UK to enhance the sustainability of new and existing development, in order to support both biodiversity recovery and climate resilience using nature-based solutions.

It aims to promote a consistent, user-friendly approach to sharing best practice, that will enable authorities to benefit from shared learning, common resources, and mutual confidence; whilst also providing stability for industry around the requirements expected from it across different parts of the country.

The Playbook is designed to be used and adapted to support the 'day job' of officers as well as elected members with responsibility for sustainability, planning, regeneration, etc. within different authorities. It may be used in the following ways (and more):

- To inform planning policy in relation to the sustainability of new development
- To enable positive engagement with developers who want to support an authority's aspirations
- To support local strategy development and target setting
- To signpost to policy precedents, industry standards, useful initiatives, case studies and other helpful resources

ii. Using and contributing to this resource

This resource is intended to be a live document to reflect the evolving policy context, feel 'co-owned' by users and involve the wider professional community. We are therefore actively seeking ongoing feedback and engagement. The Playbook is primarily a guide; and the aim is that users can 'dip into' those sections that are relevant and useful to them, depending on their capacity/progress etc.

Recommended actions for those in government authorities:

- Consider how and when the recommendations can be incorporated into policy and associated guidance & give us your feedback
- Open up or maintain dialogue with UKGBC on the status of your current policy and future plans

Recommended actions for built environment professionals:

- Consider the implications of the policy recommendations for your projects and business model
- Positively engage with UKGBC through membership, to develop further iterations of policy proposals

Part 1 – Local Strategies and target setting

Summary of recommendations

Authorities across the UK have several responsibilities, duties and obligations related to delivering both local climate resilience and nature recovery, with implications for new development and large-scale regeneration.

A cross-departmental strategic approach, with key targets and appropriate progress indicators, is essential for ensuring nature recovery and climate resilience are embedded across all authority decision making, service provision, and planning. This section outlines key principles and approaches for developing and/or drawing together relevant local strategies, to help deliver climate resilience and nature recovery.

Recommendation 1: Produce or refresh an appropriate, cross departmental strategy

A clear, cross departmental strategy is essential for raising the profile of biodiversity and climate resilience across an authority, as well as subsequently informing development planning. Depending on local circumstances, including capacity constraints, knowledge gaps and policy requirements, authorities should identify and deliver the most appropriate route to putting in place a strategy, considering:

- *Refreshing or developing a Biodiversity Action Plan (or future Local Nature Recovery Strategy England)*
- *A Green and Blue Infrastructure Strategy*
- *A dedicated Adaptation Plan*
- *A Tree Strategy*

In order to maximise the multifunctional benefits of relevant solutions a joined-up, strategic approach should be taken.

Recommendation 2: Form - and engage with - an appropriate partnership of key stakeholders

A coalition of willing partners and stakeholders in the area should be convened to take forward and help resource development of an appropriate strategy. Opportunities should be sought to link in with existing partnerships such as Local Nature Partnerships to coordinate priorities and prevent duplication.

Recommendation 3: Deploy and utilise a robust evidence base to baseline local circumstances

Gathering and deploying an extensive evidence base to define the baseline of the state of biodiversity and resilience in the local area is essential for delivering a robust strategy, targets and effective interventions. Authorities should utilise extensive data sets, such as local environmental records centres, GIS data and tools currently available before - if required and resourcing allows - commissioning or working with partners on bespoke assessments and tools to provide a more detailed picture.

Recommendation 4: Set robust, measurable targets

Authorities should set clear, measurable, monitorable targets for biodiversity and resilience enhancement across their operations and localities. As a minimum, these should align with national and international commitments. More ambitious targets should seek to implement targeted interventions, including for specific habitats, species recovery and green infrastructure provision.

Recommendation 5: Help secure delivery by setting out clear action plans, responsibilities, and financing options

A strategy should include clear actions and cross departmental responsibilities for achieving targets. This should include targeted action on key species, habitats, and climate risks. Securing the long-term sustainable management of related assets and interventions will be a critical challenge, and different financing mechanisms under development should be explored.



Part 2 – Strategic and spatial planning

Summary of recommendations

Securing nature's recovery and climate resilience, alongside wider environmental socio-economic objectives, requires substantive consideration at both a **strategic** and **spatial** level.

The scale of **strategic planning** makes it especially important for securing biodiversity recovery and climate resilience at scale, alongside delivering long-term sustainable development. Cross-boundary cooperation is increasingly important for addressing issues, and delivering solutions to issues that do not correspond to jurisdictional boundaries, and can involve wider landscape or regional areas, such as catchment areas or local ecosystem recovery.

Local planning authorities across the UK all produce some form of local, **spatial development plan**. In particular, the principles and policies underpinning site selection and land allocation at the plan-making stage are vital for complying with legal duties to take biodiversity and adaptation into account.

Green and blue infrastructure (GI), Nature Recovery, Biodiversity Net Gain (BNG) and climate resilience must not be just seen as individual policies, but fall within a breadth of policies that recognise the multifunctional benefits across a number of Local Plan themes/areas. This section sets out additional, broad local spatial planning criteria, which can be used to suitably assess site allocation, and inform the local plan making process.

Recommendation 1: Strategic plans, frameworks, strategies, and partnerships should embed and promote a clear, strategic approach to biodiversity enhancement and climate resilience

Strategic plans, frameworks and/or strategies should:

1. Ensure nature recovery and climate resilience goals are upfront as part of any shared priorities and objectives [or a part of a memorandum of understanding]
2. Draw together, and embed, existing environmental and socio-economic strategies [through a common, joint framework]
3. Utilise, and reflect, extensive spatial data, including wider GIS data.
4. Prioritise supportive resilient transport and infrastructure solutions
5. Plan for nature restoration and climate resilience at scale

Recommendation 2: Spatial planning, strategic policies, and site allocations should ensure development is directed towards sustainable locations, and strategic environmental initiatives are safeguarded

In addition to the above, site allocations and spatial planning policies should:

1. Deploy extensive climate-risk and biodiversity evidence to inform strategic allocations and associated policies, including to ensure:
 - A. Development is steered away from current and future areas of flood risk, localised overheating, and coastal erosion, prioritising avoidance over mitigation and management

B. Land needed for future flood risk management infrastructure is safeguarded. Opportunities should be taken to reduce overall flood risk through natural flood management.

C. Developer contributions are targeted towards appropriate flood and coastal risk management infrastructure.

D. Multi-functional green infrastructure benefits, including for biodiversity, are maximised. Should consider the effect of development sites on local biodiversity, the capacity of biodiversity to adapt to climate change, and associated biodiversity restoration opportunities at scale.

E. The implications and opportunities of the site for the resilience the existing communities is considered, including through active water management, and sustainable drainage systems

*F. Adopt a reasonable 'worst-case' climate impact scenario**

2. Develop strategic, multifunctional GI priorities, networks and policies.

**'reasonable' action is dependent on the locally specific degree of risk*

Recommendation 3: Neighbourhood and community planning must support ambitious local action on nature and resilience

Neighbourhood and community plans should be encouraged and supported to follow best practice examples and guidance on applicable biodiversity and resilience measures that can be delivered locally.

Part 3 – Development management, standards, and planning policy

Summary of recommendations

Under the current plan-led system, to ensure new development delivers measures to enhance resilience and biodiversity, local development plans must contain detailed policies and requirements on climate adaptation and biodiversity enhancement. Only by ensuring robust resilience and biodiversity enhancement measures are central to local planning policies will it guarantee a local planning authority has effectively discharged its legal obligations.

In the following sections, we have made recommendations about the requirements we believe authorities should introduce to drive sustainable development in their area, based on feedback of what is both suitably ambitious and achievable. We recognise that a patchwork of different standards in different locations is challenging for developers. The approach we have followed attempts to balance the need for consistency with the need to enable local government to set suitably ambitious policy.

This is also aligned with the position UKGBC has taken with central Government. We advocate for strong national policy, which sets out clearly a future trajectory of escalating minimum standards – which local authorities can move in advance of, if they choose to, whilst maintaining consistency in terms of metrics and approach.

In developing local policies, the general principles that planning authorities should follow include:

- Ensuring that adaptation and biodiversity are embedded throughout the narrative of the development plan policy;
- Sustainability policies are developed in an integrated and holistic way to deliver multifunctional benefits across related areas;
- The requirements placed upon development are clear and precise wherever possible, in order to create certainty for the community and applicants.

Recommendation 1: Planning policies should require green infrastructure to be delivered through new development in line with best practice principles in local and national GI frameworks.

As a minimum, these should reflect national guidance and frameworks being produced. Local frameworks and bespoke principles can also be developed to provide a more targeted approach for the local area. The use of appropriate established assessment frameworks and systems is recommended to help ensure high-quality outcomes.

Recommendation 2: Authorities should develop and introduce greening factors into local planning policies or design codes.

GI Scoring should be customised to support local strategic priorities.

Recommendation 3: Local planning authorities should set tree canopy cover targets in local planning policies

This should include detailed requirements involving Arboricultural Impact Assessments to be conducted and tree protection and planting plans be submitted. Ambitious tree canopy cover policies should require applicants to assess existing canopy cover using the BS5837 tree survey.

Best practice indicates that targets should aim for approximately 20 to 25% coverage in order to achieve the associated benefits. Targets may be higher in rural areas, and in central urban areas physical constraints may mean targets are towards the lower end of this recommended range.

Recommendation 4: Local planning authorities should develop planning policies that look favourably on plans involving specific GI Interventions assessed to be most relevant to the nature and strategic priorities of their areas (in line with local strategies)

Such as green roofs, in urban areas. Authorities should use, and signpost to, relevant tools to aid delivery.

Recommendation 5: Authorities should introduce standard planning conditions and policies to require low cost/no regret biodiversity enhancement measures

This should include no-regret / low-cost measures such as swift boxes, planting native species, bee bricks, hedgehog highways and water butts. Accompanying Guidance notes should be provided to help ensure effective delivery.

Recommendation 6: Design codes, guides and masterplans should include ambitious resilience measures and nature-based design solutions

Design codes, guides and placemaking initiatives should seek to reflect best practice examples, guidance and initiatives. Nature-based solutions and landscaping level solutions should be prioritised within masterplanning, to enhance the climate resilience and biodiversity of development. For ambitious authorities, requirements should be set that a site-specific design code is prepared for every major housing application, building on and delivering the provisions in an authority-wide code. A design review panel should be established or externally commissioned as a chargeable service, with a policy requirement and all major housing projects should be subject to a programme of design review.

Nature-based solutions and landscaping level solutions should be prioritised within masterplanning, to enhance the climate resilience and biodiversity of development. Such as replacing hard surfaces with soft landscaping and trees, which can reduce embodied carbon whilst also delivering increased biodiversity net gain and a reduction in flood risk.

Recommendation 7: Authorities should introduce policies and requirements to directly combat overheating in new development

Including:

- Demonstrating compliance with the cooling hierarchy (See London Plan) and [best practice guidance](#).
- Require the use of the TM52 and/or TM59 dynamic thermal modelling approach in relation to key building typologies and heating systems, where there is a higher risk to occupants of overheating, using the latest weather datasets for current and future temperatures (e.g. Design Summer Years).
- Deliver multifunctional green infrastructure in line with best practice recommendations, such as tree canopy cover targets [see above] and [blue Infrastructure/wetland creation](#).
- Include policies to discourage hard surfacing and encourage soft landscaping
- Introduce policies to look favourably on the installation of no-regret adaptation measures, such as the installation of external shutters, awnings, and blinds.
- Apply the high-risk, simplified approach for suitable risk areas outside of London.
- Require a **Sustainability Statement** be submitted to demonstrate compliance with the above, including signposting to the use of a locally developed, or nationally recognised screening tool. The London Plan now requires the use of the [GHA overheating toolkit](#). Other tools include BRE's temperature reporting tool, currently used as part of the Home Quality Mark or the Passivhaus Planning Package (PHPP) to screen for a high overheating risk and there may be potential need for further measures.

Stretching requirements include:

- All large developments implement a soft landings approach from 'Phase 1: Inception and Briefing' as per BSRIA BG 54/2018 Soft Landings Framework 2018, to ensure any building requirements set at the beginning are maintained throughout the project from inception to completion and beyond.
- All developments shall put in place a recognised monitoring regime to allow the assessment of energy use, indoor air quality and overheating risk for 10% of the proposed dwellings for the first five years of their occupancy, and ensure that the information is provided to the applicable owners and the planning authority.

Recommendation 8: Policies should include clear requirements for property flood resilience measures to be included in relevant development, particularly in at-risk areas

These measures should be specified and installed in accordance with the industry Code of Practice for property flood resilience. In addition:

- Local policies should require the use of sustainable drainage systems (SuDs) on all developments over one dwelling (minimum), including requirement for SuDS systems to incorporate multi-functional benefits (as set out within the [SuDS Manual](#)).
- Policies should require surface water management features should be designed in accordance with the nationally described Hierarchy of Drainage and the most recent edition of the [CIRIA SuDs Manual](#) and [DEFRA's technical standards on sustainable drainage systems](#).

- *Policies should be introduced to discourage development with significant levels of hard surfacing and instead, look favourably on plans involving significant soft landscaping, green and blue infrastructure and solutions such as permeable paving.*

Recommendation 9: Authorities should seek to introduce ambitious water efficiency requirements

- *Local authorities (in England) should adopt the 110 lpppd standard.*
- *Authorities should introduce policies to encourage or look favourably on rainwater/ greywater harvesting technology.*

Recommendation 10: Authorities should seek to introduce ambitious and tailored biodiversity net gain (BNG) requirements

Authorities should:

- *Introduce a target for development to deliver 20% net gain on large sites, seeking to prioritise off-site enhancement linked to local nature recovery priorities in securing gains and additionality beyond the minimum 10% enhancement.*
- *Ensure that BNG contributes to wider nature recovery plans and strategic objectives, linking to local strategies (see section 2).*
- *Develop a Supplementary Planning Document to set out details of the preferred BNG delivery approach, including a strategy for achieving the desired balance of on-site off-site delivery. This should include support and specific guidance for delivering appropriate habitats, such as appropriate wildflower species planting.*
- *Require the delivery of measurable outcomes and associated best practice, including the latest Defra metric(s), or the new British Standard for BNG – BS 8683. This standard identifies the ecological data required and considerations for its assessment, and its use in the design of mitigation measures.*
- *Integrate and fully reflect consideration of the mitigation hierarchy.*