

Guidance Note

South Warwickshire Local Plan - ENG Integration

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Project Background

LUC was commissioned to deliver 'critical friend' review of draft policy wording to support South Warwickshire and Stratford Councils in development of the South Warwickshire Local Plan. This work sits in parallel with other elements of policy support which LUC delivered including the development of evidence to support the Councils in going above 10% BNG within the Local Plan.

In addition, LUC was commissioned to prepare the Green and Blue Infrastructure and Open Space Study for South Warwickshire.

Purpose of this guidance note

To provide recommendations for integrating Environmental Net Gain (ENG), ecosystem services and Nature-based Solutions (NbS) within draft Environment and Net Zero policies. The note sets out each of the policies subject to critical friend review and makes recommendations to strengthen wording and embed multiple benefits.

Content and structure

This guidance note contains recommendations for policy wording and supporting text in response to draft Regulation 19 Local Plan policies, which were provided by South Warwickshire and Stratford Councils on 2nd February 2026. The note is structured to cover each policy as follows:

1. Policy name
2. Draft Reg 19 policy wording from Council
3. LUC's recommendation

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Local Nature Recovery Strategy (LNRS)

Draft Regulation 19 Policy Wording:

Policy

Development proposals must have regard to the Warwickshire Local Nature Recovery Strategy (LNRS), including its priorities, spatial opportunities and Local Habitat Map.

Development should contribute to nature's recovery in South Warwickshire by:

- a. maintaining, restoring or enhancing habitats;
- b. improving ecological connectivity; and
- c. supporting priority species identified in the LNRS.

Where development includes biodiversity or wider environmental enhancement measures, including Biodiversity Net Gain (BNG), Environmental Net Gain (ENG) and off-site provision, these should align with LNRS priorities and spatial guidance.

Supporting text

The Environment Act 2021 introduced Local Nature Recovery Strategies (LNRS) to provide a statutory, evidence-based framework for restoring nature across England. The Warwickshire LNRS, prepared by Warwickshire County Council as the Responsible Authority, identifies existing habitats, biodiversity priorities, and the most effective locations for habitat creation, enhancement and restoration.

The LNRS is not a planning designation and does not introduce new development constraints. Instead, it provides a spatial strategy to guide where nature recovery actions will deliver the greatest benefits, including strengthening ecological networks, restoring degraded habitats, and supporting priority species.

Local planning authorities must have regard to the LNRS* when preparing Local Plans and determining planning applications. This policy ensures that development contributes positively to these strategic priorities and that any biodiversity or environmental enhancements are delivered in the most effective locations.

Where the LNRS is updated during the plan period, the most up-to-date version will be used in decision making.

*For information the proposed changes to planning law referenced by DEFRA in December 2024 have not yet taken effect inferring that local authorities must 'have regard' to the Warwickshire LNRS. Once enacted plan-makers will be legally required to 'take account' of the Warwickshire LNRS. It is expected that Defra will provide guidance to what this entails once the requirement is enacted.

LUC Recommendations:

The Levelling-up and Regeneration Act 2023 requires public bodies to "take account" of the LNRS. A key opportunity for South Warwickshire to do so, is through embedding it within their updated Local Plan and ensuring strategic land use planning takes this into account.

Commented [LC1]: At the present moment is it not to 'have regard' and future legislation is planned to bring in 'take account'?

Policy wording

The LNRS policy should be strengthened with regards to recognition of its use as a tool in spatial planning to address local challenges and pressures through a series of mapped and unmapped priorities and measures ("actions"). Although the Warwickshire LNRS has not yet been published, the Local Plan should signpost to the overarching themes of the LNRS, including water resilience, urban green and blue placemaking, sustainable nature-friendly land management, natural processes and NbS, and nature markets as relevant themes when considering how the LNRS could be used to identify opportunities for delivering NbS and optimizing the delivery of ecosystem services, through actions for nature recovery. The policy can make reference to the use of the LNRS to guide interventions for mitigation and offsetting related to planning proposals, especially BNG.

The middle paragraph in this policy is relatively generic and non-specific to the LNRS, other than reference to priority species identified. This could be improved through integration of specific priorities embedded within the draft LNRS or aligning wording to that used within the LNRS.

Furthermore, you could require developers to “demonstrate that proposals have had regard to...”. Supporting text could include ways in which this can be achieved through, for example:

- Making recommendations for GBI, NbS or ecological enhancements aligned with the priorities and measures within the LNRS,
- Demonstrate alignment with the LNRS through application of *Strategic Significance* to BNG proposals,
- Offsetting environmental impacts using measures identified within the LNRS,
- Utilisation of the APIB and ACB layers in any spatial analysis or design thinking.

Supporting text

The supporting text should explain how the Warwickshire LNRS, in association with other plans and strategies should be used to inform strategic land use planning. It should set the foundation for identifying site-based and landscape scale opportunities for addressing the dual challenges of nature recovery and climate adaptation. It should also be used to inform BNG proposals and where possible, developers should seek uplift in BNG units provided on-site through alignment with the proposals and thereby assigning the Strategic Significance multiplier in the Statutory Metric.

Green and Blue Infrastructure (GBI)

Draft Regulation 19 Policy Wording:

Policy

Development must protect, enhance, and expand green and blue infrastructure (GBI). GBI includes trees, woodlands, hedgerows, watercourses, wetlands, ponds, canals, floodplains, open spaces, and other natural features. GBI should be well-connected, provide multiple benefits and be integrated into the design from the earliest stages, forming a key part of placemaking and sustainable development.

Protect and enhance existing GBI

Development must protect existing natural features, including, but not limited to:

- Trees, woodlands, hedgerows, and other priority habitats
- Watercourses, wetlands, ponds, canals, floodplains, riparian habitats and sustainable drainage systems (SuDS)
- Open spaces and recreational areas of ecological, social, or landscape value

Landscape-led design

Development should:

- Respond to the local landscape character
- Protect and enhance historic assets and their settings
- Support high-quality placemaking and sustainable design
- Use native species, climate resilient planting and tree canopy cover

Ecological connectivity and networks

Development should:

- Reduce habitat fragmentation
- Connect habitats and green/blue corridors within the site and to surrounding areas

- Align with local and regional strategies, including the South Warwickshire GBI Study, regional Green Infrastructure Strategy, and the Warwickshire Local Nature Recovery Strategy (LNRS)

Multi-functional benefits

Development should deliver multiple benefits, including:

- Biodiversity and environmental gains (in line with policies NE?? and NE??)
- Flood risk reduction using natural features and Sustainable Drainage Systems (SuDS) that also enhance water quality, biodiversity, amenity, and public access
- Carbon storage and sequestration
- Climate resilience
- Accessible open spaces for health, recreation, and wellbeing

Active travel and recreational links

Development should:

- Connect to Public Rights of Way, cycle networks, canal towpaths, and Greenways
- Include greening, habitat enhancement, and safe, accessible routes.

Measurable greening and open space standards

Development should:

- Meet specific quantitative targets for tree canopy, urban greening and open space (*to be finalised by LUC evidence*)
- Demonstrate how proposals meet these standards in line with relevant policies on open space, trees/woodlands, and BNG/ENG.

Green and Blue Infrastructure Strategy

Major developments must provide a GBI strategy, either within the Design & Access Statement or as a separate document, showing:

- Design sensitive to landscape and historic assets
- Connectivity to the ecological network
- Multi-functional benefits for flood risk, water quality, biodiversity, carbon storage, and recreation
- Integration of nature-based solutions (NBS), SuDS, and BNG/ENG measures
- Active travel links and greening
- How the development meets quantitative greening/open space standards

Consultation and management

- Engage relevant experts and stakeholders early in the design process.
- Secure long-term management, monitoring, and funding for GBI features for at least 30 years.

Supporting text

Green and blue infrastructure (GBI) is a key part of South Warwickshire's natural environment, providing multiple benefits for people, wildlife, and the local economy. It supports biodiversity, manages flood risk, improves water quality, stores carbon, enhances landscapes, and provides accessible recreational spaces.

GBI should be planned strategically, linking green and blue spaces within development sites and across the wider area. Development proposals should consider guidance from the Warwickshire Local Nature Recovery Strategy (LNRS) and the South Warwickshire Green Infrastructure Study to ensure networks are protected, enhanced, and connected. Multi-functional

design, integrated from the earliest stages, ensures that GBI contributes to ecological resilience, climate adaptation, health, and wellbeing.

Opportunities for GBI include creating connected open spaces, improving rivers and floodplains, restoring habitats, enhancing historic landscapes, and supporting active travel routes. Proposals should demonstrate how GBI will be incorporated into site design, linked to surrounding areas, and maintained in the long term to ensure ongoing benefits for people, wildlife, and the environment.

LUC Recommendations:

Policy wording

Greater emphasis on how GBI planning and interventions can deliver ecosystem services through the creation and implementation of NbS should be included. NbS typically create significant opportunities for enhancing GBI provision especially when incorporated on-site within development. Similarly, as part of strategic planning for the delivery of green infrastructure, active travel routes and green and blue corridors, consideration should be made to location, form and function for the co-delivery of NbS such as SuDS.

Direct reference should be made to the LNRS and how this can be used to guide analysis and design of nature related interventions, offsets and enhancements within GBI.

The policy should reference the UGF standards set out in the GI Strategy for new residential and commercial developments.

The policy should recommend adherence of proposals to the Natural England GI Framework.

Supporting text

Multi-functional GBI offers significant opportunity for targeting the delivery of priorities and measures of the LNRS and may be used to identify opportunities for delivering co-benefits through increasing the provision of ecosystem services such as improving air and water quality, providing cooling and shading, reducing flooding and increasing sequestration and storage. Additionally, BNG offers a delivery mechanism for achieving multifunctional GBI, and contributing to other natural environment policies such as multi-functional SuDS. Careful design of GBI integrating these considerations and features should be required.

Natural England's EBN tool also enables estimation of UGF, which could be useful in support of the GBI policy. It could also recommend use of the Building with Nature (BwN) tool for new developments wishing to demonstrate a "gold standard" approach. It requires a specialist assessor to confirm that the development proposal meets the required standards to be awarded BwN certification. Although this can't be mandated, it offers the opportunity for developers to demonstrate their commitments to the natural environment with regards to increasing public awareness and demand for corporate environmental responsibility and transparency.

Environmental Net Gain (ENG)

Draft Regulation 19 Policy Wording:

Policy

Development should deliver measurable environmental net gain by protecting, enhancing, and creating natural assets and ecosystem services wherever possible. This applies, but is not limited to, biodiversity, carbon storage, soils, water quality and quantity, air quality, and green and blue infrastructure.

All development will be required to:

- a. apply the mitigation hierarchy, prioritising avoidance and minimisation from the earliest design stages;
- b. protect and retain existing natural assets, including designated sites, priority habitats and species, irreplaceable habitats, carbon-rich soils and peatlands, wetlands, hedgerows, trees, and other areas that provide ecosystem services; and
- c. prioritise on-site measures to enhance natural assets and ecosystem services, support LNRS priorities, and ensure that development leaves the local environment in a measurably better state than before.

Where off-site delivery is necessary to achieve measurable environmental net gain:

- it must be clearly justified with evidence;
- it should support Local Nature Recovery Strategy (LNRS) priorities and wider ecological and climate resilience objectives;
- delivery should use registered local or national schemes, including those set out in the Warwickshire, Coventry and Solihull Green Infrastructure Strategy (Annex A – Ecosystem Services Trading Protocol), as updated; and
- all off-site measures must be legally secured, monitored, and managed for the long term (at least 30 years).

Environmental Net Gain (ENG) must not substitute for the avoidance or mitigation of harm to statutory or irreplaceable environmental assets, which are subject to separate protections under Policy NE?? Protection of Sites, Habitats and Species.

Supporting text

Environmental Net Gain (ENG) ensures that development improves the local environment beyond baseline protections. It applies to biodiversity, carbon storage, soils, water quality, air quality, and green and blue infrastructure, reflecting the interdependence of natural assets and ecosystem services.

Developers should prioritise on-site gains wherever feasible, integrating environmental enhancements into design, layout, and long-term management. Where off-site provision is necessary, measures must align with LNRS priorities and recognised local or national schemes, including those set out in the Warwickshire, Coventry and Solihull Green Infrastructure Strategy (Annex A – Ecosystem Services Trading Protocol), to ensure strategic, measurable, and enduring benefits.

ENG is complementary to Biodiversity Net Gain (BNG) and GBI policies, but it must not replace the avoidance or mitigation of harm to statutory or irreplaceable environmental assets. Long-term management, monitoring, and funding are essential to maintain the effectiveness of environmental gains and ensure they deliver lasting benefits for biodiversity, climate resilience, and local communities.

LUC Recommendations:

Policy wording

Integrate the Natural England's Environmental Benefits from Nature (EBN) tool in addition to BNG for all eligible development proposals from the early stages such as optioneering right through to detailed design. This could contribute to the delivery of a range of quantifiable ecosystem services alongside biodiversity enhancement by enabling better understanding of the influence of different landscape proposals on ecosystem services, enabling developers to maximise soft landscaping and SuDs design, which optimises the wider environmental benefits and ecosystem services delivered. It can also quantify services provided, though whatever approach is adopted the use of the EBN tool should be cautious as it is still in Beta phase.

The plan could encourage, but not mandate, allocated sites to take account of ENG through the use of the EBN tool.

Some elements of the existing policy replicate other policies, such as around the protection of natural assets including designated sites. Instead, the focus should be on the protection of natural assets and natural capital and the provision of ecosystem services. Caution is recommended when referring to the mitigation hierarchy in relation to net gain due to the distinct BNG hierarchy as this has diverged from the mitigation hierarchy. This also applies to the **BNG policy**. we recommend integration and alignment of these two policies as there is repetition and significant overlap (see note below). BNG should follow the PPG and NPPF, as well as emerging requirements on the minimum size of sites. As a result, the policy should reflect that 0.2ha is the minimum size BNG is applicable to, that going above 10% can't be mandated across an entire area, rather it should be site based. It should also reflect the evidence supplied by LUC specifically in regards to the requirements for going above 10%.

With reference to the EBN tool, development proposals should demonstrate the potential gains and losses and trade-offs to establish the most effective gains to address local needs. This should be justified and contextualised in relation to nature conservation status, community and business needs and local, regional and national strategies. furthermore, developers should demonstrate alignment with the LNRS in analysing and proposals of environmental gains where possible.

n.b in our previous note LUC recommended not adopting a standalone ENG policy because we could identify no other plans that had been found sound with robust, standalone ENG policies. Furthermore, there is no evidence base nor examples for mandating ENG. As a result, we urge caution with inclusion of this policy as per our previous note, which recommended not including a standalone ENG policy. Further to this, the approach to ENG described in the policy and above in our recommendations links to the NPPF requirements for requiring net gain to the environment as part of sustainable development. BNG was designed to provide a mechanism to do just this in regard to biodiversity, and the EBN tool has been designed in turn to work directly with the Statutory Metric. As a result, embedding BNG policy wording in the ENG policy would ensure greater clarity for developers and planners, ensure clear linkages across these and also make the ENG policy more robust.

Supporting text

The existing supporting text replicates what is covered in other policies around the ecological mitigation hierarchy and protection of natural assets. The two should not be confused or amalgamated. Instead, this should focus on explaining what ENG is and making reference to the trade-offs which occur with regards to natural capital and delivery of ecosystem services, the application of the EBN tool and how this all links with BNG and the LNRS.

Carbon sinks and sequestration

Draft Regulation 19 Policy Wording:

Policy

Development must protect, enhance, and support the long-term storage and sequestration of carbon in natural and semi-natural habitats.

All development will be required to:

- a. apply the mitigation hierarchy to avoid harm to carbon sinks wherever possible; and
- b. protect and retain existing carbon-rich habitats and features, including soils, peatlands, woodlands, hedgerows, wetlands, grasslands, waterbodies, and other areas identified as significant carbon stores.

All development is expected to:

- a. deliver measurable carbon storage or sequestration gain, prioritising on-site measures that enhance the carbon function of habitats and deliver wider environmental co-benefits, in accordance with the LNRS and Environmental Net Gain principles set out in Policy NE??; and
- b. secure the long-term management of retained and enhanced carbon sinks, proportionate to the development and carbon outcomes proposed.

Where measurable carbon storage or sequestration gain cannot reasonably be achieved on-site, this must be clearly justified through proportionate evidence. Off-site provision should support LNRS priorities and wider ecological and climate resilience

objectives and may be delivered through recognised schemes including those set out in the Warwickshire, Coventry and Solihull Green Infrastructure Strategy (Annex A – Ecosystem Services Trading Protocol), as updated.

Carbon sequestration measures must not substitute for the avoidance or mitigation of harm to carbon-rich or irreplaceable habitats, soils or peatlands.

Supporting text

Natural carbon sinks play a critical role in mitigating climate change while supporting biodiversity, water regulation and other ecosystem services. Protecting and enhancing these assets contributes to climate resilience and delivers multiple environmental benefits.

Opportunities to maintain, restore and enhance carbon sinks should be integrated into site design, land management and long-term stewardship, and aligned with LNRS priorities. All measures should be legally secured and managed to ensure long-term effectiveness.

LUC Recommendations:

Policy wording

Wording could be strengthened through greater specificity that gains should be delivered through nature related interventions such as tree planting, soil enhancement, or habitat improvements.

The long-term management of the retained, enhanced and created habitats providing a carbon sink should be demonstrated within a landscape management plan and/or habitat monitoring and management plans (HMMPs) in the case of BNG eligible development proposals.

Utilising the Warwickshire Carbon Standard, Woodland Carbon Code and Peatland Carbon Code, development proposals should demonstrate measurable carbon storage and sequestration gains through habitat enhancement and creation and the delivery of NbS. These benefits should be delivered on-site wherever possible, before delivering offsite or through purchase of high integrity carbon credits in line with the mitigation hierarchy.

Supporting text

Habitat enhancement and creation, particularly of habitats with high carbon sequestration rates such as woodlands and wetlands offers significant opportunity for increasing carbon storage within development proposals. Additionally, the delivery of NbS provides opportunity for delivering co-benefits such as carbon sequestration and storage.

Trees, Hedgerows and Woodlands

Draft Regulation 19 Policy Wording:

Policy

Development must protect, enhance and expand trees, hedgerows and woodlands as integral components of South Warwickshire's natural environment, landscape character, and green and blue infrastructure.

Development must:

- Apply the mitigation hierarchy, prioritising avoidance and minimisation of tree, hedgerow and woodland harm or loss from the earliest stages of site selection and design.
- Protect and retain existing trees, hedgerows and woodland of ecological, landscape, historic or amenity value, including, but not limited to:
 - o ancient woodland, ancient trees and veteran trees;
 - o trees subject to Tree Preservation Orders (TPOs);

- o species-rich, ancient or important hedgerows; and
- o woodland, groups of trees and individual trees that contribute to ecological networks, green and blue infrastructure or local character.
- Ensure appropriate buffer zones are maintained around ancient woodland, ancient and veteran trees, and other irreplaceable habitats to avoid direct or indirect harm, including impacts on hydrology, soil conditions, shading, lighting, disturbance, or root damage, and in accordance with Policy NE?? Protection of Sites, Habitats and Species.
- Integrate retained trees, hedgerows and woodland into site layout and design, ensuring they shape streets, open spaces, SuDS, and green and blue infrastructure corridors, and perform functional benefits within the development such as shading, cooling, flood mitigation, SuDS integration, and placemaking.
- Support Local Nature Recovery Strategy (LNRS) priorities, ecological connectivity, and wider green and blue infrastructure networks.

Development is expected to:

- Deliver a measurable increase in tree canopy cover in line with policy NE?? Tree Canopy Cover, prioritising on-site measures that improve habitat quality, ecological connectivity and long-term ecological resilience, in accordance with the LNRS and Environmental Net Gain (ENG) principles set out in Policy ??; and
- Secure the long-term management and maintenance of trees, hedgerows and woodlands, proportionate to the development and ecological outcomes proposed.

All planting must:

- Use native and climate-resilient species, appropriate to their location and intended function, support structural and species diversity, and contribute to ecological networks;
- Be designed to maximise functional benefits and integrate with site layout, SuDS, and placemaking.
- Be protected during construction and have appropriate long-term management and establishment arrangements, including replacement of failed planting where necessary, to ensure their health, function and contribution to biodiversity and ecosystem services over the lifetime of the development.

Where measurable tree canopy cover increase cannot reasonably be achieved on-site, off-site delivery may be considered where clearly justified with proportionate evidence. Off-site measures must support LNRS priorities, comply with Policy NE?? Environmental Net Gain and may be delivered through recognised local or national schemes, including those set out in the Warwickshire Green Infrastructure Framework (Annex A – Ecosystem Services Trading Protocol), as updated.

Measures to enhance trees, hedgerows and woodland must not substitute for the avoidance or mitigation of harm to statutory or irreplaceable environmental assets, which are subject to separate protections under Policy NE?? Protection of Sites, Habitats and Species.

Supporting text

Trees, hedgerows, and woodlands are important for South Warwickshire. They support wildlife, provide habitats and corridors for species, store carbon, reduce flooding, improve air quality, cool local areas, and make our landscapes and communities more attractive and healthy. They are also key parts of the area's green and blue infrastructure.

This policy reflects national planning rules, including the National Planning Policy Framework (NPPF), which protects irreplaceable habitats and encourages planning for biodiversity and green infrastructure. It also supports local strategies like the Local Nature Recovery Strategy (LNRS) and Environmental Net Gain (ENG), helping to improve and expand natural spaces in the district.

Tree cover is uneven across South Warwickshire, with some areas having few trees. This can increase heat, reduce air quality, and limit access to green space. Hedgerows, woodland edges, and mature trees are vital for connecting habitats and helping

wildlife move safely. The policy prioritises keeping existing trees and hedgerows, enhancing them, and planting new trees and hedgerows to increase canopy cover, strengthen ecological networks, and deliver measurable environmental improvements.

Trees, hedgerows, and woodlands should be considered from the start of development design. They should shape streets, open spaces, and drainage features, not just be left as leftover areas. Properly designed planting can provide shade, reduce flooding, support biodiversity, and contribute to the character and feel of the area. Long-term care and management are essential to make sure benefits last.

The policy follows the "mitigation hierarchy": avoid harm first, reduce impacts where possible, and replace lost trees if needed. New planting is expected not just to replace losses, but to achieve net gain in tree canopy cover, biodiversity, and ecosystem services. Off-site planting may be considered only when on-site improvements are not possible and must support LNRS priorities. Irreplaceable trees, hedgerows, and woodland must always be protected.

Development must follow recognised guidance to protect trees and woodlands. This includes BS 5837 for tree protection, BS 8545 for planting new trees, UK Forestry Standards (UKFS), and advice from the Arboricultural Association, Woodland Trust, Ancient Tree Forum, and Hedgelink. Following this guidance helps ensure trees, hedgerows, and woodlands continue to provide benefits for people, wildlife, and the environment.

LUC Recommendations:

Policy wording

The policy should emphasise the importance of retaining mature trees where possible, as these contribute significantly not only to canopy cover but also with regards to the existing provision of ecosystem services such as carbon storage, flood alleviation and cooling and shading. Ancient woodland and ancient and veteran trees form Irreplaceable Habitats and should be retained as such within development due to the significant ecological, landscape and ecosystem service benefits which they provide associated with their age and habitat composition. In line with the mitigation hierarchy, clear-felling of existing trees on development sites and replacement with smaller stock (e.g. whips / transplants) should be avoided due to the time it takes for new trees and woodlands to establish and compensate for the loss in ecosystem services such as carbon storage and sequestration.

Where loss is unavoidable, and in line with the mitigation hierarchy and BNG delivery, replacement trees of equivalent sufficient size and value should be proposed as part of the development in order to ensure that the loss of ecosystem services is adequately compensated.

In the context of 'right tree, right place', the policy should reference the urban tree canopy cover targets (UTCC) set out in the GI Strategy for new residential and commercial developments. It should also reference the role ecological appraisals and the use of the LNRS informing the best location and type of planting. Reference should be made to the role of BNG in providing a delivery mechanism for tree and woodland planting. Connection should be made between the mapped measures ("actions") of the LNRS with regards to trees, hedgerows and woodlands and opportunity for delivering BNG which contributes to delivery of these actions within the specific areas identified as of high strategic significance within the LNRS.

The policy should make reference to the multiple benefits that can be achieved through tree planting and woodland creation within the urban and rural contexts as it provides a NbS to climate change. The policy should set out the requirement to adhere to best practice and recommend seeking specialist arboricultural and forestry advice when designing tree and woodland planting schemes to ensure that benefits are maximised and the ecological processes, and long-term maintenance and management are considered and well demonstrated within proposals. The policy should recommend that landscape proposals demonstrate how the 'right tree, right place' concept has been considered.

Climate resilience is a key consideration with regards to tree and woodland planting, and appropriate consideration of species selection and placement should be made with reference to best practice guidance, and informed by specialist arboricultural and forestry advice. The policy should recommend that landscape proposals demonstrate how climate resilience has been considered.

Utilising the Warwickshire Carbon Standard and Woodland Carbon Code, development proposals should demonstrate measurable carbon storage and sequestration gains.

Supporting text

Set out guidance with regards to the idea of 'right tree, right place' for tree planting within new development. This requires due consideration of the species of tree and location of planting, which should be guided by ecological appraisal of the site and local context, to ensure that it is appropriate and will not cause detriment to existing habitats of high value such as heathland or species-rich grassland. Additional consideration is required for the priorities and measures ("actions") set out in the Warwickshire LNRS is essential in order to target tree and hedgerow enhancement and planting and the enhancement and creation of new woodlands to the areas which will have most benefit for nature recovery.

Urban tree planting can contribute significantly to BNG delivery within new development and also forms a key element of high quality green space and green infrastructure design. Urban tree and woodland planting offers a range of benefits including air and water quality improvements, cooling and shading (particularly important in residential developments and when designing community facilities such as schools and healthcare facilities such as care homes, but also with regards to open spaces and particularly playgrounds).

Within the rural context, it provides a NbS to climate change, as it can assist with alleviating flood risk when considering the 'right tree, right place' concept as part of natural flood management initiatives. Tree and woodland planting can also provide cooling and shading, which is an essential benefit with regards to climate adaptation. The role of trees and woodlands in cooling and shading within the rural landscape has significant benefits in terms of soil carbon storage as it prevents erosion and soil evaporation. It can also offer co-benefits with regards to climate adaptation by improving animal welfare, including livestock.

Reducing Flood risk

Draft Regulation 19 Policy Wording:

Policy

Development should be prioritised to areas of lowest flood risk and must not increase flood risk elsewhere, taking account of climate change over the lifetime of the development.

All development must:

- a. apply a sequential approach to site selection, layout and design, considering flood risk from all sources, including fluvial, surface water, groundwater and sewer flooding, informed by the latest Strategic Flood Risk Assessment (SFRA), national and local flood risk mapping, and available historic flood information;
- b. demonstrate, through proportionate evidence, that flood risk will be managed safely within the site and will not increase flood risk to surrounding or downstream areas; and
- c. incorporate flood risk management measures from the earliest stages of site design.

A site-specific Flood Risk Assessment (FRA) will be required for development, in accordance with national policy and guidance. Where the development includes existing watercourses, the risk of river flooding must be fully appraised. Where existing flood risk information or modelling is absent or of insufficient quality, proportionate hydraulic modelling may be required to fully assess flood risk. Submitted FRAs should have regard to the recommendations of the latest SFRA and Warwickshire County Council's Local Flood Risk Management Strategy.

All development must be supported by a drainage strategy demonstrating that surface water will be managed in line with the drainage hierarchy and that flood risk will not be increased to surrounding or downstream areas (see Policy ?? (SuDs) for detailed requirements).

Development proposals must account for climate change, including exceedance events and the potential failure of infrastructure. Layouts must ensure that overland flow routes are safely managed through the site and do not place people or property at increased risk.

Within sites at risk of flooding:

- a. buildings and access routes must be located in areas of lowest flood risk;
- b. safe access and egress must be demonstrated;
- c. finished floor levels must be set at least 600mm above the 1% annual probability plus climate change flood level; and

d. mitigation must be provided for any residual flood risk.

Where land re-profiling or compensation works are proposed within areas at flood risk, these must be necessary to manage flood risk and should not be used to increase the developable area of the site. Proposals should be supported by post-development hydraulic modelling to demonstrate they do not increase flood risk. Detailed consideration must be given to exceedance and overland flow routes where ground levels are altered.

Development should create space for water through the use of green and blue infrastructure, including, where appropriate, restoring functional floodplains (Flood Zone 3b) and opportunities for river restoration and enhancement.

An undeveloped buffer of at least 8 metres must be provided along watercourses, measured from the top of the bank or the centreline of a culvert, to allow for maintenance, flood conveyance, and ecological enhancement.

Development must not prejudice the operation of existing or planned flood risk management schemes. Land required for current and future flood management purposes will be safeguarded from development.

In terms of the risks to traditional buildings from flooding, care must be taken not to introduce inappropriate retrofitted measures which would prevent effective drying and shorten the life of the building.

Supporting text

South Warwickshire has a history of flooding from multiple sources, and climate change is expected to increase both the frequency and severity of flood events. In addition to these existing risks, recent canal failures, including the Bridgewater Canal & Llangollen Canal, have highlighted a residual risk of flooding from canals. Where relevant, this additional risk should be considered within a Flood Risk Assessment.

This policy ensures that flood risk is avoided wherever possible and managed effectively where development is necessary. It promotes the use of nature-based solutions and green and blue infrastructure to reduce flood risk while delivering wider environmental benefits, including improved biodiversity, water quality and amenity.

Flood Risk Assessments and drainage strategies should be informed by the latest Strategic Flood Risk Assessment, Warwickshire County Council's Local Flood Risk Management Strategy, and advice from the Local Lead Flood Authority (LLFA).

Managing flood risk is therefore a key component of sustainable development and climate resilience.

LUC Recommendations:

Policy wording

Natural flood management measures should be recommended; prioritisation of NbS should be demonstrated within decision making as part of the development of flood alleviation schemes. Opportunities for delivering natural flood management measures should be identified from the Warwickshire LNRS, and catchment management plans.

Incorporating SuDS features within development proposals provides significant opportunities for increasing surface water flood risk resilience.

Strategically located tree planting should be incorporated where appropriate and where evidence and analysis suggests such locations will result in flood risk reduction.

Supporting text

Natural flood management can provide significant benefits not only in terms of natural intervention of high rainfall events but also with regards to the multiple benefits which it provides through the associated habitat enhancement and creation and resultant ecological and climate resilience. The integration of natural flood management within flood alleviation schemes and design of new developments provides a significant increase in delivery of additional ecosystem services such as water quality improvements and carbon storage, when compared with hard "grey" infrastructure such as engineered flood defences.

Multi-functional Sustainable Drainage Systems (SuDS)

Draft Regulation 19 Policy Wording:

Policy

High-quality, multi-functional Sustainable Drainage Systems (SuDS) should be implemented proportionately across all development to manage surface water runoff, reduce flood risk, and deliver wider environmental benefits.

All development must demonstrate, through a drainage strategy, that:

- a. surface water runoff will be managed as close to source as possible;
- b. there will be no flooding of properties from all sources up to and including the 1% annual exceedance probability (AEP) event, plus appropriate allowance for climate change; and
- c. development will not increase flood risk on-site or to the surrounding area.

SuDS must be designed as an integral part of the site layout and should:

- a. prioritise above-ground, source-control and dispersed SuDS features rather than reliance on single large storage features;
- b. provide multiple benefits, including flood risk reduction, water quality improvement meeting the four stage SuDS treatment train, biodiversity enhancement with features designed as habitat assets amenity and landscape integration, including accessible GBI and urban heat island mitigation, in line with Environmental Net Gain principles (Policy ??); and
- c. be designed to remain effective, safe and functional for the lifetime of the development, with long-term management arrangements secured.

Preference will be given to SuDS that retain water at the surface, including ponds, wetlands, swales, rain gardens and other vegetated systems, as these deliver the greatest water quality, biodiversity, and amenity benefit. Dry attenuation basins will only be supported where applicants can demonstrate, through evidence, that water holding SuDs are not feasible due to site specific constraints.

The Drainage Strategy must demonstrate compliance with the National SuDS Standards, including the seven key standards, supported by guidance in the CIRIA SuDS Manual (C753) and Warwickshire County Council Flood Risk Guidance for Development. Surface water must be kept separate from foul drainage in accordance with the drainage hierarchy. On brownfield sites, opportunities should be taken to disconnect surface water and highway drainage from combined sewers wherever feasible.

Surface water discharge rates must be limited to greenfield runoff rates (QBar) for all modelled rainfall events up to and including the 1% annual probability event plus climate change allowances, unless otherwise agreed with the LLFA.

SuDS features should be located outside areas of known or modelled flood risk from rivers or surface water wherever possible. Where high groundwater levels may constrain SuDS design, proportionate monitoring may be required to inform the drainage strategy.

Applicants must give early consideration to overland flow routing when designing site layouts. Development should be sympathetic to existing watercourses and surface water flow paths. Blue-green corridors should be retained and enhanced to reduce flood risk, improve water quality, support biodiversity and provide amenity space, and aligned with the Local Nature Recovery Strategy (LNRS) priorities.

Development proposals must protect and improve the quality of water bodies. Drainage strategies should include a proportionate assessment that identifies potential pollution risks and shows how the SuDS scheme will manage and mitigate those risks, for example through the Simple Index Approach or other appropriate methods.

A SuDS Management and Maintenance Plan must be provided for the lifetime of the development. The plan should identify the body responsible for ongoing management, demonstrate that the SuDS design is adoptable by a water company, local authority, or management company, and include a clear schedule of inspections, maintenance tasks and funding arrangements to ensure the system remains safe, effective and functional in the long term.

Supporting text

SuDS mimic natural drainage processes and provide a more resilient and sustainable approach to managing surface water than traditional piped systems. When well designed, SuDS can reduce flood risk, improve water quality, support biodiversity, and create attractive spaces for people.

The most effective SuDS solutions are those that retain water at the surface, such as wetlands, ponds, rain gardens and other vegetated features. These systems slow run off, promote natural treatment processes, support habitat creation and contribute positively to the character of new development. They also provide resilience to drought and heat stress by enhancing evapotranspiration and supporting the green and blue infrastructure.

By contrast dry attenuation basins typically deliver only a single function – temporary storage of run-off and often fail to provide meaningful ecological or amenity value. They can also present long-term maintenance challenges and may degrade visually if not carefully managed. For these reasons the Council encourages the use of permanent water SuDS wherever feasible.

Early consideration of SuDS at the master-planning and pre-application stages allows features to be integrated into development layouts (rather than dominating these areas), maximising their multi-functional benefits and reducing land-take. Applicants are encouraged to engage with the LLFA at an early stage and to demonstrate that they have followed the SuDS hierarchy, giving priority to surface level water retaining features.

SuDS can make a positive contribution to biodiversity net gain and wider environmental net gain by creating wetland habitats, green corridors and multifunctional open spaces. Appropriate design, planting and long-term maintenance are essential to ensure that SuDS deliver these benefits alongside their drainage function.

LUC Recommendations:**Policy wording**

Decision making around the integration of SuDS features, should be demonstrated within development proposals reflecting each stage from early optioneering to detailed design to ensure that the use of SuDS optimises flood resilience, and delivers multiple benefits such as ecological and climate resilience.

The provision of SuDS should draw on information within local Surface Water Catchment Management Plans and the Warwickshire LNRS. Specific priorities and measures (“actions”) of the Warwickshire LNRS should be considered, particularly in relation to the following themes: water resilience, urban green and blue placemaking, sustainable nature-friendly land management and natural processes and NbS.

National SuDS Standards must be adhered to in order to ensure that SuDS features are designed to be appropriate to the location and site context with regards to plant selection and topography etc. Additionally, they should maintain suitable water quality to support biodiversity and avoid excessive organic detritus, include nutrient control to prevent eutrophication.

As with all landscape design features, SuDS require long-term maintenance and management, which should be set out within landscape management plans and/ or Habitat Monitoring and Management Plans (HMMPs) where they form part of BNG delivery.

Early engagement with key consultees including regulators such as the Lead Local Flood Authority, Natural England, Environment Agency and other delivery stakeholders such as Water Companies, Local Nature Partnerships and Catchment Partnerships is essential to successful design and implementation of large-scale SuDS features.

Supporting text

Early consideration for SuDS provision such as raingardens, green-blue roofs, swales, constructed wetlands and attenuation ponds and infiltration basins within the design of development can enable effective delivery of multi-functional features. They can deliver biodiversity, amenity, and climate benefits while effectively managing surface water. SuDS provide surface water flood risk alleviation and surface water storage during periods of high rainfall, but they can also provide substantial contribution BNG delivery. SuDS can contribute significantly to achieving on-site BNG, especially within urban developments. However, they are also an option for delivering off-site net gain.

The design and development of SuDS, which are informed by local ecological context incorporating local habitat and species priorities, will result in development of features with most ecological value. This contributes to enhanced ecological and climate resilience and should be informed by the LNRS.

Naturalised surface level SuDS have most benefit for wildlife where these incorporate soft landscaping and habitat features for wildlife such as swales and attenuation ponds. However, SuDS which are incorporated into building design and retrofit in the urban environment such as green - blue roofs also have benefit to wildlife where substrates, topography and vegetation communities are varied, enabling use by a range of invertebrates, birds and bats.

Green - blue roofs provide opportunities for incorporating SuDS features within building design and reducing urban storm water runoff. Where these are designed to capture rainwater this can reduce overall water consumption associated with building maintenance such as the irrigation of soft landscaping, trees and planting. Green - blue roofs provide additional benefits through reducing and stabilising internal building temperatures, further increasing overall energy efficiency. In accordance with the Statutory Biodiversity Metric¹ and UK Habitat Classification² definitions, the following SuDS features support biodiversity (demonstrated through Biodiversity Units) and sustainable water drainage. 'Intensive Green Roofs' (which can include SuDS features, and are considered to be green – blue roofs), 'Bioswales', 'Raingardens' and 'Sustainable Drainage Systems' all achieve moderate Biodiversity Units.

The highest Biodiversity Units are achieved from 'Biodiverse Green Roofs', which should have a substrate depth (not including a blanket or turf) that varies between 80 and 150mm. 'Other Green Roofs' deliver the lowest Biodiversity Units of these urban features as these are typically dominated by few Sedum plant species with a shallow depth of 80mm and do not contain SuDS.

With regards to design of SuDS and other nature-based solutions, CIRIA have developed a tool called "ciriabest" which provides a cost-benefit assessment, incorporating ecosystem services and natural capital to inform economic value.

In the face of climate change and increasing frequency and duration of seasonal flooding and summer droughts, well designed SuDS can provide a flood risk solution, enable rainwater capture and re-use, provide important habitat and water sources for urban wildlife such as birds, bats and insects within otherwise developed areas and offer attractive GBI assets as part of placemaking.

Pollution and Environmental Quality

Draft Regulation 19 Policy Wording:

Policy

Development must not cause unacceptable pollution or environmental harm to human health, amenity, or the natural environment.

All development must apply the mitigation hierarchy to avoid, minimise, and mitigate pollution from:

- Air, water and soil contamination;
- Noise, vibration and odour;
- Artificial light; and
- Other harmful emissions or discharges.

Where harm cannot be fully avoided or mitigated, development may only be permitted if:

- a) Residual harm is compensated or offset through measurable environmental improvements, habitat creation or enhancement, or the delivery of environmental or biodiversity net gain;
- b) Compensation or net gain is delivered through recognised schemes, including the Warwickshire, Coventry and Solihull Green Infrastructure Strategy (Annex A – Ecosystem Services Trading Protocol) or equivalent;

¹ <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

² <https://www.ukhab.org/>

c) Net gain or compensation measures are additional to, and do not replace, avoidance or mitigation of statutory, irreplaceable, or sensitive environmental assets;

d) Measures are secured, monitored, and managed long-term, proportionate to the impact.

e) Development does not contribute to unacceptable cumulative or in-combination pollution impacts when considered alongside existing or planned development.

Development sensitive to pollution (including housing, schools, hospitals, care homes, parks and recreational spaces) will only be permitted where:

- it would not result in unacceptable harm to human health or quality of life due to existing or historic land uses; and
- adequate avoidance, mitigation, or compensation measures can be implemented.

Supporting text

Pollution can have significant impacts on human health, quality of life, and the natural environment. Planning decisions should prevent unacceptable harm while supporting environmental improvement and sustainable development.

The NPPF emphasises that planning policies and decisions should contribute to, and enhance, the natural environment by:

- Preventing new and existing development from contributing to, or being adversely affected by, unacceptable levels of soil, air, water, noise, or light pollution;
- Ensuring development complies with national pollution limits and standards; and
- Taking account of local air quality management arrangements, including Air Quality Management Areas and Clean Air Zones.

Where development has the potential to generate pollution or is sensitive to existing sources, developers are expected to assess likely impacts and demonstrate how they will be addressed. This may include measures to avoid or minimise pollution, manage residual risks, and, where harm cannot be fully avoided or mitigated, provide compensatory actions or deliver wider environmental benefits.

Compensation or environmental improvements could take the form of habitat creation or enhancement, water or soil quality improvements, noise or light reduction measures, or other interventions that deliver measurable benefits for both people and wildlife. Planning conditions or legal agreements may be used to secure the long-term management and monitoring of these measures.

This approach ensures that pollution is managed in a way that protects human health, supports biodiversity and ecosystem services, and contributes to Environmental Net Gain and wider Local Nature Recovery Strategy priorities.

LUC Recommendations:

Policy wording

Pollution controls and mitigation measures should be embedded within development proposals, incorporating a suite of measures including hard infrastructure, supplemented by urban greening and NbS. Nature related interventions to mitigate effects should be prioritised, and consideration of how these can deliver multiple benefits should be demonstrated.

References to ecologically sensitive features would be welcome alongside requirements for developers to consider these with additional caution. Mitigation and from pollution is more challenging for these sensitive receptors and therefore avoidance should be the priority here.

Supporting text

Air pollution from road traffic can be mitigated through the incorporation of green infrastructure such as buffer planting including trees, hedgerows and scrub to help capture atmospheric pollutants. This is particularly beneficial when positioned adjacent to major roads and can also be used to provide both a physical and visual barrier to road traffic pollutants around sensitive areas such as housing, schools, hospitals, care homes, parks and recreational spaces.

The causes of water pollution are wide ranging and thus the solutions implemented to address different types of pollution must be specific to the pathways, chemicals and receptors concerned. Agricultural water pollution can be mitigated through use of buffer planting, and the creation of wetlands and reedbeds, which can reduce excess nutrients from manure and sludge through bioremediation. This improves water quality and reduces the risk of eutrophication. Other sources of water pollution include surface water run off from roads, which contains hydrocarbons, contaminants, sediments and microplastics. This can be mitigated through the creation of wetlands, stormwater ponds and soakaways. Water pollution from foul wastewater is considered within a separate policy for water supply and wastewater infrastructure.

Exploration of what the Council consider to be sensitive ecological receptors such as priority habitats and watercourses would be welcome.

Water Supply and Wastewater Infrastructure

Draft Regulation 19 Policy Wording:

Policy

All development must ensure that adequate water supply and wastewater infrastructure exists or will be provided to serve the development.

Development must:

- Demonstrate, in consultation with the relevant water company, that a reliable water supply exists or will be made available to serve the development.
- Ensure sufficient foul sewerage and wastewater treatment capacity exists, or will be delivered ahead of occupation, without causing detriment to the existing network or water environment. Where upgrades to the wastewater network or treatment works are required, planning permission may depend on securing their delivery through planning conditions, obligations, or other mechanisms agreed with the water company.
- Comply with the surface water drainage hierarchy as set out in the National SuDS Standards and CIRIA SuDS Manual (C753). Surface water and foul drainage systems must be kept separate. Any connection of surface water to foul sewers are unacceptable unless approved by the SuDS Approval Body (SAB) and only where no other viable option exists.
- Major developments, and smaller proposals where water or wastewater capacity constraints exist, must be supported by an Outline Foul Drainage Strategy, showing:
 - o Required foul drainage assets and proposed points of connection;
 - o Whether adoption by the water company is intended;
 - o Any sewer requisitions, diversions, or reinforcement works;
 - o Phasing arrangements to ensure water and wastewater infrastructure is delivered in step with occupation.
- Prevent deterioration of water quality in watercourses or groundwater, individually or cumulatively and ensure arrangements align with Water Framework Directive objectives and relevant River Basin Management Plans.
- Not compromise access to, or the safe and efficient operation of, existing water supply, sewerage, or wastewater treatment infrastructure. Appropriate mitigation or diversion measures must be secured where necessary.

The Local Plan supports proposals for new or upgraded water supply or wastewater treatment infrastructure where required to meet the needs of planned growth, address existing deficiencies, or improve environmental outcomes, provided environmental and amenity impacts are acceptable.

Development near wastewater treatment works or significant sewerage infrastructure must be supported by appropriate assessments (e.g. odour, noise, aerosols) and demonstrate acceptable living conditions without constraining operations.

Supporting Text

Development can place significant pressure on water resources and wastewater infrastructure. Without coordination, growth may exceed available water supply capacity, overload sewerage networks, or adversely affect the water environment.

While this policy primarily targets major development, the cumulative impacts of minor development should also be considered. Applicants are expected to liaise with the relevant water company to confirm capacity and phasing requirements.

Severn Trent Water is the statutory water supply and sewerage undertaker for South Warwickshire. Although developments with planning permission currently have a right to connect to the public water and foul sewer networks, this does not guarantee that sufficient capacity exists. Early engagement with Severn Trent Water is therefore essential to identify any necessary network or treatment upgrades and to ensure that development can be phased appropriately.

The potential enactment of Schedule 3 of the Flood and Water Management Act 2010 will remove the automatic right to connect surface water to the public sewer network. Any connection will require approval from the SuDS Approval Body (SAB), and should only be permitted where no other viable option exists.

This policy should be read alongside other Local Plan policies on water efficiency, flood risk management and sustainable drainage systems (SuDS). Together, they ensure growth is coordinated with water resource management, infrastructure provision, and environmental protection.

LUC Recommendations:**Policy wording**

Sustainable water supply and wastewater infrastructure measures should be embedded within development proposals, incorporating a suite of measures including hard infrastructure, supplemented by urban greening and NbS.

Emphasis should be placed on the protection of watercourses and the policy could require developers to demonstrate how wastewater treatment will be sufficiently resilient to not allow overflow directly into watercourses. NbS such as reedbeds should be recommended where such risks are identified.

Supporting text

Sustainable water supply can be supplemented by surface water retention basins for rainwater harvesting, which can be used for irrigation purposes.

Constructed wetlands provide a sustainable and reliable solution to secondary and tertiary wastewater treatment systems and have been established to deliver wastewater treatment at varying scales, and system types, offering an adaptable solution to replace and/ or supplement hard infrastructure. Constructed wetlands typically comprise reedbeds, which provide ecological benefits through the creation of habitat supporting a range of ecological niches. These provide water quality improvements through bioremediation and also enable wider environmental benefits such as carbon sequestration, reduced energy usage and importantly it provides a sustainable alternative to chemical dosing, reducing reliance on carbon-intensive materials and chemicals. With regards to landscape design, integrated wetlands can provide a unique feature within housing and commercial developments contributing to the overall green infrastructure network.

Net Zero Building Design (new buildings) – Offsetting**Draft Regulation 19 Policy Wording:****Policy**

New-build residential development of 1 or more homes shall make the fullest possible contribution towards mitigating climate change (reducing carbon emissions) by meeting all of the following steps.

a. The new-build residential development shall be designed to achieve net zero, or where possible net negative, operational energy use, through meeting all of the following energy performance requirements:

i. ≤ 20 kWh/m²/year space heat demand.

ii. ≤ 35 kWh/m²/year total energy use intensity (EUI). On developments of multiple buildings, it will be acceptable for this to be met as a site-wide average, provided that no individual home exceeds 60kWh/m²/year.)

iii. Onsite renewable electricity generation capacity kWp equal to (ground floor area x 60% / 4.5).

1.Or, if the kWp target is unfeasible, then provide renewable electricity generation kWh equal to the home's annual total energy use.

2.It is acceptable for the renewable target to be met on a site-wide basis, including in mixed-use (see policy NZC2 for non-residential).

iv. The development shall not be connected to the gas grid. Buildings shall not use fossil fuel other than safety-critical backup power systems.

b. To minimise the energy performance gap between design and use:

i. Compliance with the above targets at application stage shall be demonstrated using an accurate energy prediction method.

ii. On completion: Major schemes should update the calculations to reflect the building's actual construction. Minor schemes should reconfirm the specifications to which they have been built.

iii. Major applications (10 or more homes) should implement an assured performance method throughout design and construction.

c. If the renewable electricity provision falls short of a net zero energy balance (1.a.iii.1), the developer will offset the shortfall via a contribution to enable delivery of the equivalent renewable generation capacity elsewhere locally. This shall be priced and ring-fenced for that purpose. Offsetting is only an acceptable route where an onsite net zero energy balance is unfeasible.

d. The developer is encouraged to demonstrate exploration of energy storage or energy sharing systems, to allow more of the onsite generation to be used on site. Where such features are incorporated, this will be recognised as a benefit with material weight.

Supporting text

- All of this policy's energy performance targets (EUI, space heat demand and renewable energy) have been demonstrated feasible in the South Warwickshire context via the accurate energy modelling evidence report of typical building types in this local plan area. That report identifies the construction specifications that would meet these performance targets in each building type, and the quantified cost uplift for those specifications compared to today's basic building standards. It can be found at [xx SWLP insert] in the local plan evidence library. The identified cost uplifts for this policy [xx are being/ have been] fed into the plan viability assessment, which can be found at [xx SWLP insert].

- Regarding the renewable electricity provision target:

- o Where it is proposed to meet the target on a site-wide basis in mixed-use, the total target should be calculated by applying the residential and non-residential (see policy NZC2) targets in proportion to their respective area.

- o There is a preference for building-mounted PV, or PV mounted over other uses such as car parking, so as to make efficient use of land as per NPPF 2024 paragraphs 129-130c. The other reason PV is preferred (and assumed in the evidence modelling) is that PV today has the best balance of low visual impact, low maintenance, and generating a useful amount of electricity while being widely suitable for integration with other uses such as residential. However, any other renewable energy generation technology can contribute towards this target where suitable for the setting and effective.

- o It will not be acceptable for the renewable energy target to be met primarily through standalone generation that has no connection to the proposed buildings or other on-site energy uses. Standalone equipment whose purpose will be primarily a commercial power station that sells REGO1 - certified electricity to the grid will not count towards this renewable energy goal (for example a commercial solar or wind farm that happens to be alongside a new residential development). However, it is acceptable, and encouraged, for the on-site renewable energy at a residential development to supply any unused energy to the grid on a standard feed-in tariff at times when onsite generation exceeds onsite demand, provided that REGO certificates are not also sold.

o The Council notes that the kWp target in point 1.a.iii.1 will in some cases result in annual renewable energy generation that would be more than the building's own annual energy demand. This makes the building 'net negative energy' in that it will export more to the grid than it annually takes from the grid. This is for the sake of maximising climate mitigation. It is considered reasonable as it has been proven feasible in the energy and cost modelling evidence, and will go some way towards either helping to decarbonise the electricity grid, or towards paying back some of the development's embodied carbon, which will not be zero (for an explanation of embodied carbon and associated targets, see Policy NZC4). However, this excess renewable energy is still only a very small contribution towards mitigating the total impact of the development. For example, the excess amount of renewable energy sent to the grid across a period of 30 years from 2026 would only represent a grid carbon saving of between 4-12% of a house's up-front embodied carbon.

o Applicants should follow MCS guidance in calculating their predicted renewable energy generation.

- Regarding the energy performance gap: This is a common phenomenon where new buildings typically perform significantly worse than predicted (using more energy) expectation for major schemes to follow an assured performance method. Up to the point of completion of a building, the main causes are poor prediction methods, errors or changes in construction compared to designs, and poor equipment installation.

o Acceptably accurate energy performance prediction methods currently include Passivhaus Planning Package (PHPP). For non-residential uses, CIBSE TM54 is another suitable method. Other suitably accurate methods may arise in the plan period. If the developer proposes any alternative method, the Council(s) may consider these on a case-by-case basis depending on track record evidence of the accuracy of that method at predicting actual energy performance. Building regulations compliance methods SAP and SBEM are not acceptably accurate for this purpose. The Council(s) are aware that SAP is being replaced by a new national method, HEM, when government updates the building regulations to the Future Homes Standard sometime between 2025 and 2027. It is not yet known whether HEM will be sufficiently accurate for compliance with the local plan policy, but evidence on this may be considered as it emerges.

o An 'assured performance' method is a series of steps from design through to building handover, aimed to avoid these pitfalls that otherwise tend to cause the energy performance gap. Several such methods have been formalised in the industry, including the Assured Performance Process by National Energy Foundation & Good Homes Alliance; Passivhaus certification process, and BSRIA Soft Landings. Other acceptable methods may be available or may arise in the plan period.

- The offsetting price shall start at xxx/kWh, and may be updated in future to keep pace with cost changes. This reflects the current estimated cost of solar PV installation, plus a margin to allow administration of the offset fund by the Council(s). It is expected to be paid into the relevant Council's offset fund, but the Council(s) will consider alternative schemes where the developer may propose a direct contribution to a suitable renewable energy installation in the area, subject to that scheme meeting the same criteria of additionality that the Council would use to select projects that its own offset fund would support. These criteria will include that the project will not sell REGO certificates, and is located in the local plan area (or less preferably the wider region).

LUC Recommendations:

Policy wording

Buildings should be designed to ensure they are low carbon and where it is not possible to achieve net zero through design, developers should demonstrate on-site mitigation through incorporating carbon sequestration measures such as tree planting.

Utilising the Warwickshire Carbon Standard, Woodland Carbon Code and Peatland Carbon Code, development proposals should demonstrate measurable carbon storage and sequestration gains, which achieve net zero carbon, through habitat enhancement and creation such as tree and woodland planting, and the delivery of nature based solutions for climate mitigation. These benefits should be delivered on-site wherever possible, before delivering offsite or through purchase of high integrity carbon credits in line with the mitigation hierarchy.

Supporting text

Habitat enhancement and creation, particularly of habitats with high carbon sequestration and storage rates such as woodlands and wetlands offers significant opportunity for achieving net zero carbon within development proposals. Additionally, the delivery of NbS provides opportunity for delivering co-benefits such as carbon sequestration and storage.