

Building a local green recovery

A local election briefing paper - May 2021

Overview

Many of the urgent changes and decisions which are needed to reduce emissions, tackle biodiversity decline, and reach Net Zero carbon have a strong local dimension. Although central government policy will be essential to overcome some of the key barriers local authorities face, there are still significant opportunities for ambitious local government actors to accelerate change at the local level.

Local authorities have significant leverage and influence through their services, planning and enforcement roles, housing, procurement, regeneration, economic development activities, education, skills services and investments. Likewise their wider potential role in facilitating local partnerships, public engagement and communication places them at the heart of developing and replicating local solutions to our environmental challenges.

Some aspects will require regional cooperation and coordination, for example, in two-tier authorities, cross-boundary local area energy planning, and regional heat decarbonisation. However, this should not deter those individual local authorities already wishing to forge ahead with delivery.

Successfully tackling the emissions and environmental impacts associated with the UK's built environment will require a particular focus on local solutions and engagement. For example, the operation of our buildings accounts for [around 40 %](#) of the UK's carbon emissions, and habitat fragmentation caused by new development can have a significant impact on wildlife.

Although these challenges are significant, action to address them also represents a major opportunity to deliver a green recovery and vital local jobs. Local authorities can play a crucial role in unlocking the potential of the construction and property sector to drive a local green recovery, through their own procurement and planning requirements, to directly tackling barriers such as through local skills and retraining initiatives.

Elected representatives can be a vital catalyst for action across a local authority, either by having responsibility for key policy areas, or by scrutinising existing practice. This short briefing note is intended primarily as an introductory resource for local authority candidates. For more information, please see the resources signposted, or contact philip.box@ukgbc.org.

Contents & recommendations:

- **Low carbon retrofit** - Unlocking the benefits of retrofit
- **New build carbon & energy** - Building sustainable new homes
- **Committing to local leadership**
- **Social value** - Ensuring sustainability delivers for communities
- **Nature & resilience** - More resilient places that help nature recover
- **Circular economy** - Reducing waste & promoting reuse



Low carbon retrofit - Unlocking the benefits of retrofit

The challenge of retrofitting existing buildings - particularly homes - is of central importance if local authorities are to achieve their net zero carbon goals. For authorities that have commissioned studies into the emissions of their area, the emissions associated with existing homes are often either the largest or second largest contributor.

Action on retrofit also represents a crucial opportunity to deliver valuable, local green jobs. Investment in home renovation to reach net zero could help support the creation of over [150,000 skilled and semi-skilled jobs](#) across England up to 2030.

To meet this challenge, UKGBC's [Accelerator Cities Programme](#) has produced a series of key recommendations for local authorities of all sizes including:

1 - Set targets and create an overarching strategy

The first step in overcoming the barriers to home retrofit is to develop a holistic, cross-departmental strategy to ensure buy-in from across the relevant teams. This can be developed by:

- Convening a coalition of local partners to develop and help resource the retrofit strategy.
- Baseline the Local/Combined Authority's circumstances - for example, political and stakeholder engagement, local stock data, the local skills profile and authority resources etc.
- Identifying appropriate targets for retrofit by working with UKGBC and other coordinating bodies to share knowledge and experience.

2 - Provide a comprehensive service for householders

Services that hand-hold people through the whole process, with independent advice from a trusted source, are likely to have the greatest chance of success. The ['One Stop Shop'](#) model offers a viable approach for local authorities, where multiple services are bundled together to offer homeowners an end-to-end journey. More information and guidance for local authorities on relevant models is available [here](#).

3 - Develop a Householder Communications & Outreach Plan

Targeted information and encouragement from a local authority can help engage residents, as local authorities are trusted by the public and benefit from existing communication channels. Working with sector partners, local authorities should create a communications and engagement plan, taking into account differing tenure types, life changes and trigger points and local demographics to communicate to residents the benefits of retrofit, the importance of whole house plans, and the importance of using only accredited installers and suppliers.



4 - When it comes to finance: explore, innovate and prepare

There are two key aspects of finance that are essential for a successful city/LA-wide home retrofit programme. Firstly - funding the development and delivery of a LA retrofit strategy; secondly - supporting retrofit finance mechanisms for householders. To capitalise on central funding as it becomes available, local authorities should prepare a full stock assessment that supports funding applications, as well as policy and programme development.

Local authorities can also play a critical role in mobilising a ['blended funding model'](#) as a facilitator, coordinator and provider of finance. The [Green Finance Institute](#) has explored possible funding mechanisms - e.g. green leases, metered energy savings, energy saving ISA, property Assessed Clean energy style financing. UKGBC and the GFI recently ran a joint workshop exploring the role of local authorities in delivering and enabling retrofit finance to all tenures, the recommendations can be found [here](#).

5 - Create a skills action plan

Local authorities should create an Action Plan to develop and support local skills and the supply chain. This could be done by setting up a task group including representatives from across the supply chain.

Data on local building types and tenures will be required to ensure the local supply chain and skills plan matches with the requirements of the area.

6 - Reach out to Registered Social Landlords (RSLs)

RSLs can be a powerful delivery partner. LAs should involve and work with RSLs in their area as part of strategy development, and set up a forum for RSLs to work collaboratively. An RSL forum hosted by the local authority can help share relevant knowledge, connect RSLs with tradespeople, and even coordinate joint bids for grant or loan funding.

For more information, see:

- UKGBC's ['The Retrofit Playbook'](#) - For more detailed guidance on what local authorities can do to encourage and develop successful home retrofit policies.
- UKGBC's ['Interactive Retrofit Map'](#) - Current best practice examples from across local authorities.
- UKGBC/GFI ['Driving retrofit at scale: funding opportunities for local government'](#) - Exploring LA's role in unlocking retrofit finance for all tenures.

New build carbon & energy - Building sustainable new homes

There is much that local authorities can do to help speed up the journey towards net zero carbon new homes through planning. UKGBC has developed a set of proposed *minimum* requirements which we believe all local authorities should introduce as soon as possible, and have proposed *stretching* requirements for those who wish to go further and faster:

1 - Reduce energy demand through regulations

In its response to the Future Homes Standard Part L/F consultation, the UK Government confirmed local authorities can still set energy efficiency requirements above the national minimum in Building Regulations.

As a minimum, local authorities should require a 31% reduction on the Dwelling Emission Rate (DER) against the Target Emission Rate (TER), based on the 2013 edition of the 2010 Building Regulations (Part L). A fabric first approach should be prioritised, ensuring that the thermal performance of the whole building envelope exceeds that of the notional specification by 5%. The energy use intensity for new homes should be reported on a kWh/m²/year (GIA) basis.

For those setting more *stretching requirements*, an energy use intensity (EUI) target of <70 kWh/m²/year operational energy use in GIA should be set, excluding renewable energy. New build homes should deliver ultra-high levels of energy efficiency consistent with a space heat demand of 15-20kWh/m²/year. Designers should evaluate operational energy use using realistic information on the intended use occupancy and operation.

2 - Tackle actual in-use performance

Next, there is a need to address the 'performance gap' - the difference between modelled energy use and predicted emissions at the design stage, and the actual 'as built' energy use of the building *in operation* - shown to be approximately [2-5 times higher](#).

To do this, *as a minimum*, developments should be required to demonstrate that the principles of [Soft Landings](#), and a recognised performance gap/assured performance tool should be used to minimise the potential performance gap. The effectiveness of measures should be reviewed and ratified as part of the post-completion discharge of conditions.

For those setting *stretching requirements*, all major developments should implement a Soft Landings approach from 'Phase 1: Inception and Briefing' as per [BSRIA BG 54/2018 Soft Landings Framework 2018](#). All developments should use a recognised monitoring regime to allow the assessment of energy use, indoor air quality and overheating risk for 20% of the dwellings and at least 90% of the common parts for the first five years of their occupancy, and ensure that the information recovered is provided to the applicable owners and planning authority.

3 - Deliver a low carbon energy supply

The energy used in new buildings must also be decarbonised to help achieve the UK's net zero transition. *As a minimum*, all new developments should not have onsite combustion of fossil fuel (exceptions only allowable with rationale clearly provided). All developments should assess the viability for onsite renewable generation. For developments with SE/SW facing roof(s), a minimum 40% solar technologies as a percentage of building footprint area should be required (unless demonstrated not practically viable). For large-scale major developments, proposals should consider the integration of new energy networks in the development within development proposals. Any new energy networks should prioritise noncombustible, non-fossil fuel energy as the primary heat source.

For those setting more *stretching requirements*, as well as the above, major developments should be required to match their total annual energy demand through a combination of renewable generation capacity, energy storage and smart controls.

4 - Address residual emissions

Some local planning authorities (LPAs) have established cash-in-lieu requirements to account for shortfalls in achieving net zero carbon developments.

To follow this method *as a minimum*, when net zero carbon cannot be achieved, all developments should be required to make a financial contribution to the LPAs carbon tax fund equal to the residual **regulated emissions** at a rate of £X/tCO₂ over 30 years. Alternatively, developments could make up the shortfall off-site by funding a carbon reduction or removal project directly, provided that the LPA has approved this approach.

For those setting *stretching requirements*, LPAs should investigate expanding their carbon tax fund to account for *residual regulated and unregulated emissions in all developments and/or residual upfront embodied carbon in large developments* maintaining the rate of £X/tCO₂ at the point of completion.

These carbon tax fund requirements have been designed to complement the targets outlined throughout the New Homes Policy Playbook and therefore should **not** be included independently in policy.

For more information, see:

- UKGBC's ['The New Build Playbook'](#) - For more detailed guidance and rationale on what local authorities can do to develop ambitious new build policies.
- UKGBC's ['Interactive New Build Policy Map'](#) - For best practice examples from across local authorities.



Committing to local leadership

Local authorities can help accelerate market demand for net zero buildings by signing up to the *Net Zero Carbon Buildings Commitment*. This enables authorities to publicly demonstrate their net zero leadership by committing to achieve net zero carbon for all relevant building areas under their direct control by 2030, and provides a framework for supporting delivery.

The Net Zero Carbon Buildings Commitment

The [WorldGBC Net Zero Carbon Buildings Commitment](#) challenges companies, cities, states and regions to reach net zero operating emissions in their portfolios by 2030 and to advocate for a net zero carbon built environment by 2050.

The Commitment provides a framework to develop globally ambitious, yet locally relevant, flexible and universally viable solutions for buildings within a portfolio, city, state or regional boundary. It sets actions to reduce energy demand and achieve net zero carbon through renewable energy and offsets (as a last resort).

By challenging local authorities to set an advanced trajectory to achieve net zero carbon in operation for their own building areas and procurement practices by 2030, the Commitment offers signatories a chance to demonstrate their commitment to ambitious action. Signing up to the Commitment can help local authorities inspire their constituents by leading from the front, and support the development of local, low carbon supply chains.

The full requirements of the Commitment are set out in the [detailed guidance document](#) developed by WorldGBC.

Case studies of Commitment signatories from states, regions and cities across the world are available [here](#).

If you are interested in signing up to the Commitment, please get in touch with us via ANZ@UKGBC.org to find out more.

For more information, see:

- **WorldGBC, 'The Net Zero Carbon Building's Commitment'** - For more information on the Net Zero Carbon Buildings Commitment, current signatories, and how to sign-up.
- **UKGBC's 'Carbon Commitment Platform'** - Profiles the companies who are already making strong climate commitments. It also provides information on voluntary commitments applicable to the built environment and, through the Climate Leadership Model, sets out a best practice approach for different types of companies owning, occupying or developing buildings.



Social value - Ensuring sustainability delivers for communities

Social value is a concept that encompasses environmental, economic and social wellbeing, and understands each of these in terms of their impact on the quality of life of people. Driving social value in processes relating to new development can be a valuable way to support the strategic priorities of local authorities, by ensuring action to improve the sustainability of the built environment also helps to build stronger communities, improve health outcomes, and strengthen local economies.

Social value has become an increasingly prominent concept in the construction and property industry thanks to the introduction of the [2012 Public Services \(Social Value\) Act](#). This placed a responsibility on local authorities in England to consider social value in service contracts above a certain threshold. A briefing note published by the Social Value Portal claims that integrating the Social Value Act into the planning process has the potential to unlock an [additional £15bn](#) in value for our communities across the UK every year.

However, the uptake of the powers under the Act has been slow and patchy. Local authorities are often unsure of the powers they have and the most effective way to embed them into existing practices. Our recommendations include:

1 - Develop a cross-departmental social value strategy

Local authorities can begin to develop a cross department strategy for development by looking across existing practices to understand where social value is currently being driven, and where opportunities for delivering social value are being lost.

Once established, a cross-department strategy for local development should be set out in the local authority's corporate Social Value Policy, which will include its approach to broader social value requirements. More detailed examples are available [here](#).

2 - Embed social value in procurement

Procurement is the process of acquiring goods, works and services from third parties, and covers everything from paperclips to major infrastructure schemes.

Local authorities use the procurement process to select partners to help them deliver development projects, for example, new schools, local authority offices or social housing.

Many local authorities have Sustainable Procurement Policies, which include requirements relating to new development. Although a local authority's overarching Social Value Policy may cover many of the same objectives as a sustainable procurement policy, many LAs have found it helpful to target social value specifically.

More information on how to embed social value in procurement practices is available [here](#).

3 - Insist on social value in planning

In August 2018, the [Strategy for Civil Society](#) announced the intention to explore the application of the Social Value Act to planning.

As in the case of procurement, requirements for social value in planning have the power to deliver additional value from the development over and above the standard planning requirements.

Social value requirements can be set out in planning obligations and planning conditions can be strengthened through the development of policy in the Local Plan, with further guidance provided in Supplementary Planning Documents.

It is important to set out the ambition for social value as soon as possible in the planning process, primarily in the pre-planning discussions. It may be that the ambition may be so clear from these discussions, there is less need to set requirements. Planning teams can benefit from following the lead set by procurement teams and seek to provide consistency in their social value requirements.

3 - Consider social value in land disposal

Local authorities can drive social value when selling land or transferring assets to local communities. They can also use measurement of social value in financial terms to calculate discounts on those transactions and give weightings to social value in the tendering process, so that bids for land can be compared in terms of the potential social value of the future development scheme.

Some social value requirements could be set in the conditions of sale, but most social value requirements will sit better in the development agreement. Land covenants could also be used to set social value requirements that ensure the ongoing maintenance of an asset, especially public assets, and ensure social value is maximised during operation. However, land covenants are more likely to be historic requirements.

For more information, see:

- UKGBC's ['Driving social value in new development: Options for local authorities'](#)
- UKGBC's ['Framework for defining social value'](#) a framework for defining social value for any individual project or place.



Nature & resilience - More resilient places that help nature recover

As well as the climate crisis, the UK is also facing an ecological crisis. [Over 40%](#) of our native species are in decline, with 15% at risk of extinction. New development can have a significant impact on wildlife, through associated habitat loss and fragmentation. Likewise, poorly considered development can negatively impact the resilience of an area to the impacts of climate change.

Ambitious local action to reverse biodiversity decline offers an opportunity to deliver a wide array of co-benefits, including improvements in residents' health and wellbeing, enhanced resilience to the impacts of climate change, and local green jobs. To seize this opportunity, we recommend the following:

1 - Develop a Green Infrastructure (GI) Strategy

Many local authorities of all sizes have developed green infrastructure strategies, designed to provide frameworks for mapping, managing, and enhancing their local environment. These strategies can explore ways to deliver a wide array of benefits, including flood resilience, mitigating overheating, recreation, and biodiversity enhancement. They can be backed by specific policies, such as in local plans, or inform wider strategies, investment initiatives and/or spatial framework priorities.

A GI Strategy is not only useful for mapping the opportunities and benefits of green infrastructure, but can also be used as a tool to secure grant funding and private investment, providing a firm commitment to improve an area's green infrastructure, and making clear where resources are most needed.

2 - Create or update a biodiversity action plan

Some authorities have produced 'Biodiversity Action Plans' which set out how the authority will use the full range of its functions to conserve biodiversity. These can also be accompanied by local tree strategies, focused on enhancing and conserving local tree coverage.

The forthcoming Environment Bill will require local authorities prepare 'Local Nature Recovery Strategies' with a statement of the biodiversity priorities for their area and a habitat map to support the [National Recovery Network](#) (NRN). However, there is currently no requirement to link these plans to the biodiversity targets to be set by the Bill, or for them to consider losses arising from planning decisions or land management practices. Likewise, the duty to apply LNRs in planning and spending decisions is extremely weak. Biodiversity Action Plans and tree strategies can therefore still be important ways to galvanize action across an authority's areas of direct responsibility, as well as prompting action in key policy areas.

3 - Embed climate resilience into planning and design

Local authorities can use their planning powers to deliver green infrastructure and climate resilience locally. Design codes and guides can also be used to provide more detailed GI requirements, together with supplementary planning guidance. The [Urban Green Factor](#) (UGF) is a possible planning policy tool to drive the implementation of Nature-based Solutions (NBS)

within urban areas. It requires new developments include a range urban greening measures to achieve a UGF score, which ensures they maximise the use and subsequent benefits of NBS.

On water demand and efficiency, the current standard in Building Regulations 2010 of 125 litres of water per person per day (Lpppd) could be more ambitious. Many authorities already require homes built to a standard of 110 Lpppd. Local authorities should also work with key partners and across authority boundaries to develop catchment management plans or local adaptation strategies.

On drainage and flood risk, local authorities can develop mapping initiatives, risk management strategies and assessment frameworks to inform their wider development plans and policies. Many local authorities and water companies are already working together to make sustainable urban drainage systems (SuDS) the rule rather than the exception in planning.

The UK Government is [consulting](#) on how to address overheating through Building Regulations. However, local authorities can still take action through including overheating mitigation within local plans, the use of nationally recognised screening tools such as BRE's temperature reporting tool, or via full dynamic analysis tools following CIBSE guidance on assessing and mitigating overheating risk. For more detail see [UKGBC's New Playbook](#).

3 - Be ambitious on Biodiversity Net Gain

The Government intends to introduce 'Biodiversity Net Gain', whereby natural habitats harmed or destroyed by a new development must be replaced by measures of equal natural value, either onsite or offsite, with a demonstrable increase in the habitat value. Biodiversity Net Gain is already part of the NPPF, but it does not specify a percentage for the gain. The Environment Bill includes a requirement for development to deliver a mandatory 10 % Biodiversity Net Gain.

Some councils have already set more ambitious requirements for 20% net gain in their local plans. This can be a vital means to accelerate the development of the associated supply chains and create local green jobs.

For more information, see:

- UKGBC's ['The New Build Playbook'](#) - For more detailed guidance in relation to overheating in new build policies.
- UKGBC's ['Making the Case for Green Infrastructure'](#)



Circular economy - Reducing waste & promoting reuse

The built environment can play a major role in creating a circular economy. In the UK, construction, demolition and excavation account for 60% of material use and waste generation. Action to promote a more circular economy can not only improve resource efficiency and reduce waste, but help substantially reduce emissions from construction.

Local authorities can set targets or requirements through planning, but also encourage good practise through their own procurement and through their wider responsibilities for waste disposal. Our recommendations are as follows:

1 - Set ambitious targets and requirements through planning

Local authorities should take steps to address the 'embodied carbon' associated with development through circular economy principles.

Embodied or upfront carbon refers to the emissions associated with making a building, such as the energy and industrial processes used in the processing, manufacture and delivery of the materials, products and components required to construct a building. Embodied carbon and the emissions from construction can account for up to half of a building's emissions over its entire life.

Many local authorities have already set ambitious targets for waste reduction and material reuse within their planning requirements. For example, some authorities have required that all developments demonstrate the actions taken to reduce embodied carbon and maximize opportunities for material reuse through the provision of a 'Circular Economy Statement'. These statements should follow the '[waste hierarchy](#)' (see [procurement](#)).

For major developments (defined as those with 10 or more dwellings or 1000 square meters of floor space) possible actions include a requirement to calculate the whole lifecycle carbon emissions (including embodied carbon emissions) through a nationally recognised Whole Lifecycle Carbon Assessment methodology, and demonstrate actions subsequently taken to reduce lifecycle carbon emissions. Data gathered from this process can serve as the basis for the introduction of broader whole life carbon reduction targets.

Other potential actions include applying mandatory pre-demolition and pre-refurbishment audits to projects above a certain size. These should include a clear demarcation of where unused materials from the site are going, to ensure better traceability of resources. BREEAM currently have guidelines for conducting a pre-demolition audit.

2 – Support circularity in procurement

Local authorities can also support the development of a more circular economy in construction through their own procurement practises.

Updated procurement standards should include circular criteria that can enable capital allowance savings through longer product lifetimes. This would reduce the environmental impact of procured products and incorporates durability and designing for disassembly into procurement. This goes beyond the current reuse and refurbish consideration for office furniture, to potentially include [Cradle to Cradle](#) or other certifications in new item and material procurement.

Publicly funded construction projects should a) be assessed on total life cycle costs and carbon; b) look to retrofit solutions first; and c) look to procure circular products (reused, designed for disassembly, recyclable). They should also follow the '[waste hierarchy](#)', prioritising waste prevention and design measures first, followed by reuse, then recycling and other recovery methods, before final disposal.

For more information, please see UKGBC's [guidance](#) for construction clients on how to practically apply circular economy principles at the project brief stage.

4 - Support circularity through local waste initiatives

Local authorities can provide practical support through their waste disposal and management responsibilities. Many have set up material reuse hubs and databases to support construction companies seeking to reuse or recycle materials.

5 - Sharing information on local services and how to support circular economy practices

Local authorities can also use their communications channels to help spread information about circular economy practises and initiatives. They can share, or learn from, success stories from other local authorities. In addition, local authority subsidised skills, education and retraining programmes can also be tailored to include a focus on circular economy principles in relation to construction.

For more information and examples, see:

- UKGBC's '[CIRCuit programme](#)' - An EU-funded project focused on helping enable cities initiate circular transitions. To get involved, please email lucy.rees@ukgbc.org.
- UKGBC's '[The New Build Playbook](#)' - For information on embodied and whole-life carbon related policy.
- UKGBC's '[Circular Economy Guidance for Construction](#)'

