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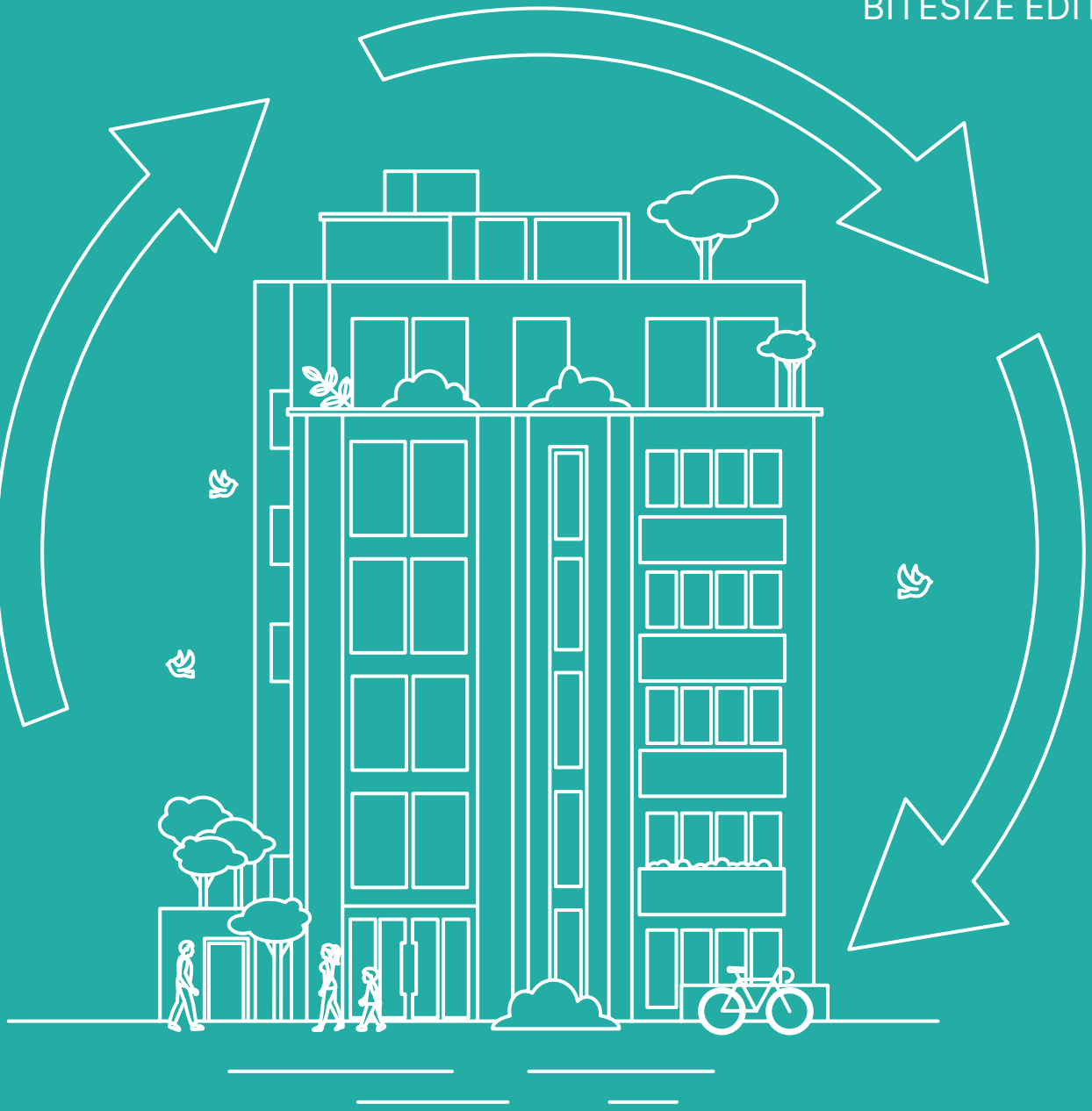

Retrofit First, Not Retrofit Only

Future-proofing national policy to support sustainable development

JULY 2024

savills

London Property Alliance

WPA Westminster Property Association | CPA City Property Association

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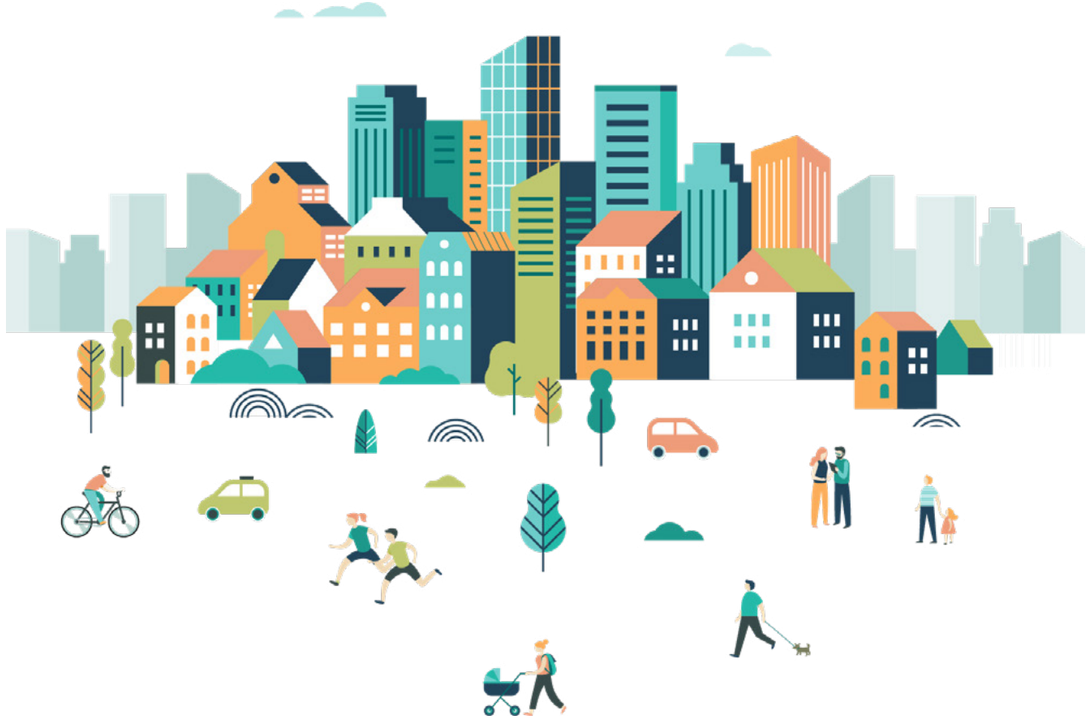
About the London Property Alliance

London Property Alliance brings together the **Westminster Property Association** (WPA) and the **City Property Association** (CPA). It is a not-for-profit membership body and advocacy group representing the leading owners, investors, professional advisors and developers of real estate operating in the **City of London and Westminster. The Alliance** provides a unified voice for the real estate sector across central London.



Foreword

The planning system plays a crucial role in society, providing the regulatory framework for future growth which underpins the country's social and economic prosperity. It is local planning authorities who have the final responsibility of applying a whole host of guidance and regulations in their areas. Limiting the built environment's impact on the environment has rightly risen to the top of the political agenda, and the decisions required to ensure our buildings are as sustainable as possible, whilst delivering the homes, workspaces and infrastructure society needs, are finely balanced.

These difficult judgements have come into even sharper focus recently, with high profile cases such as M&S's flagship Marble Arch store on Oxford Street and Mitsubishi/CO-RE's South Bank ITV Studios proposals creating winners and losers in the process – albeit M&S's ongoing appeal against the former Secretary of State's refusal may yet swing the decision back in its favour.

The property industry, particularly the commercial sector which forms the majority of the London Property Alliance's membership, has led the charge in making buildings highly sustainable, embracing innovation to supply the huge demand for best-in-class offices and mixed-use spaces.

It has also readily adopted a retrofit first approach, accepting the logic that it is a whole lot better to try and retain what is already there rather than incur the costs, time and inherent waste in demolishing something that appears to most people to be eminently serviceable. But whilst this might be the ideal, it is also the case that there will be situations where retrofit does not deliver the best solution – which suggests the more sensible policy, as the Alliance's forerunner to this report pointed out, would be for each case to be judged on its merits. Sometimes a blend of redevelopment and refurbishment is the best way forward; in other cases we may have to accept that a building simply does not merit saving, and indeed a new one in its place will deliver far better outcomes over its lifespan.

This, of course, is where the fun starts, since as the recent high profile cases have sadly shown, both sides are able to call on experts, models and statistics to prove their case – and judging who is right or wrong requires an Einstein level of knowledge and understanding which it is unreasonable to expect a local authority to display and which even a Secretary of State may find challenging. The obvious answer to this is clear and straightforward national guidance which provides greater clarity for planners, politicians and property professionals alike. The National Planning Policy Framework (NPPF) sits at the top of the planning matrix and provides a solid base to build on. It sensibly sets out the three objectives of sustainable development as economic, social and environmental, but it does not currently expand sufficiently on these in a way which helps assess the competing options using standardised metrics which are fair and transparent and accepted by all parties.

The recommendations in this paper provide for some simple changes that would give all parties a framework for assessing the relative merits of retention, partial refurbishment or complete replacement. They encompass all aspects of the carbon challenge whilst also allowing for other environmental, social and economic factors to be taken into account. If they were to be enshrined in national policy then we would have one methodology for assessing the merits of any development proposal. Yes – there would almost certainly be an element of political judgement in the final decision but at least some of the bickering and time-wasting arguments leading up to that point could be largely avoided. And we could get on with producing a built environment that is fit for the future.

Liz Peace
CBE

Introduction

Our planning system plays an essential role in curating our cities, towns and villages. It underpins and supports the delivery of the homes we live in, our places of work, our parks and public realm and the transport networks we use every day. It is one of the country's most important levers in delivering sustainable growth and supporting our communities.

However, the current system can be complex to navigate and resource intensive, with the benefits of development not always clearly evidenced. This complexity arises, at least in part, from the increasing array of issues that the planning process has to grapple with, when considering larger proposals particularly, as part of the requirement to assess the sustainability of new development. However, it has become apparent from recent case law that national policy requires some updating in these regards to steer all the parties involved in the process on the formulation of policy, on the design of new proposals, and how these should be assessed.

Under national policies set out in the National Planning Policy Framework (NPPF), the planning system has three core objectives for sustainable development: economic, social and environmental. These are interdependent and need to be pursued in mutually supportive ways to create the homes, workplaces, shops, cultural and leisure amenities we all use; in turn contributing to the creation of vibrant places and communities that people want to live and work in, and where they can prosper.

These objectives ensure that alongside the social and economic benefits development can bring, we must achieve environmental sustainability. Buildings are among the largest contributors to carbon emissions. But we need to look beyond the impact of construction alone, and factor in emissions generated over the lifetime of a building.

Retrofit has a role, alongside partial retrofit, and in some instances full redevelopment, in helping to meet our net zero ambitions. Development also provides social benefit through the provision of training and apprenticeships during construction, from the new homes created, and the jobs created once workplaces are occupied. Economic benefit is also derived from those jobs, alongside the financial contributions unlocked through development which enable investment in supporting infrastructure, the provision of affordable homes, public realm improvements and new community facilities.

Planning applications need to be assessed in a proportionate way which balances all three objectives of sustainable development. Carbon is important, but how it is assessed and weighed against other measures is complex. There is currently no national standardisation of metrics used or guidance on how we evaluate these. This lack of clarity risks an increasingly fragmented approach and uncertainty for communities and investors alike. This can complicate the assessment of proposals, delay planning decisions, and increase the risk of legal challenges, which can in turn hinder the creation of sustainable development.

With the new Government set to consult on a growth-focused approach to planning, it is timely for the London Property Alliance to revisit the need for clearer national guidance in this report, which proposes practical and easily implementable amendments to the NPPF that will help planners, elected members, applicants and communities to better understand and assess the merits of development.

Rob Bristow
Immediate Past President, Planning Officers' Society

Rob Bristow is Director of Climate, Planning and Transport at the London Borough of Lambeth and the Immediate Past President of the Planning Officers' Society, which represents c2,000 individual planners working in 80% of the local authorities and public sector organisations in England.

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PART 1

Executive summary

01

CHAPTER SUMMARY

- Report rationale, context and overview
- Key findings
- Key recommendations

Executive summary

Efforts to reduce the impact of buildings on the environment are rightly a priority for the public and private sector alike. Everybody agrees that ensuring our buildings are energy efficient and designed to make the best use of limited resources is essential. But how we achieve that is far from clear.

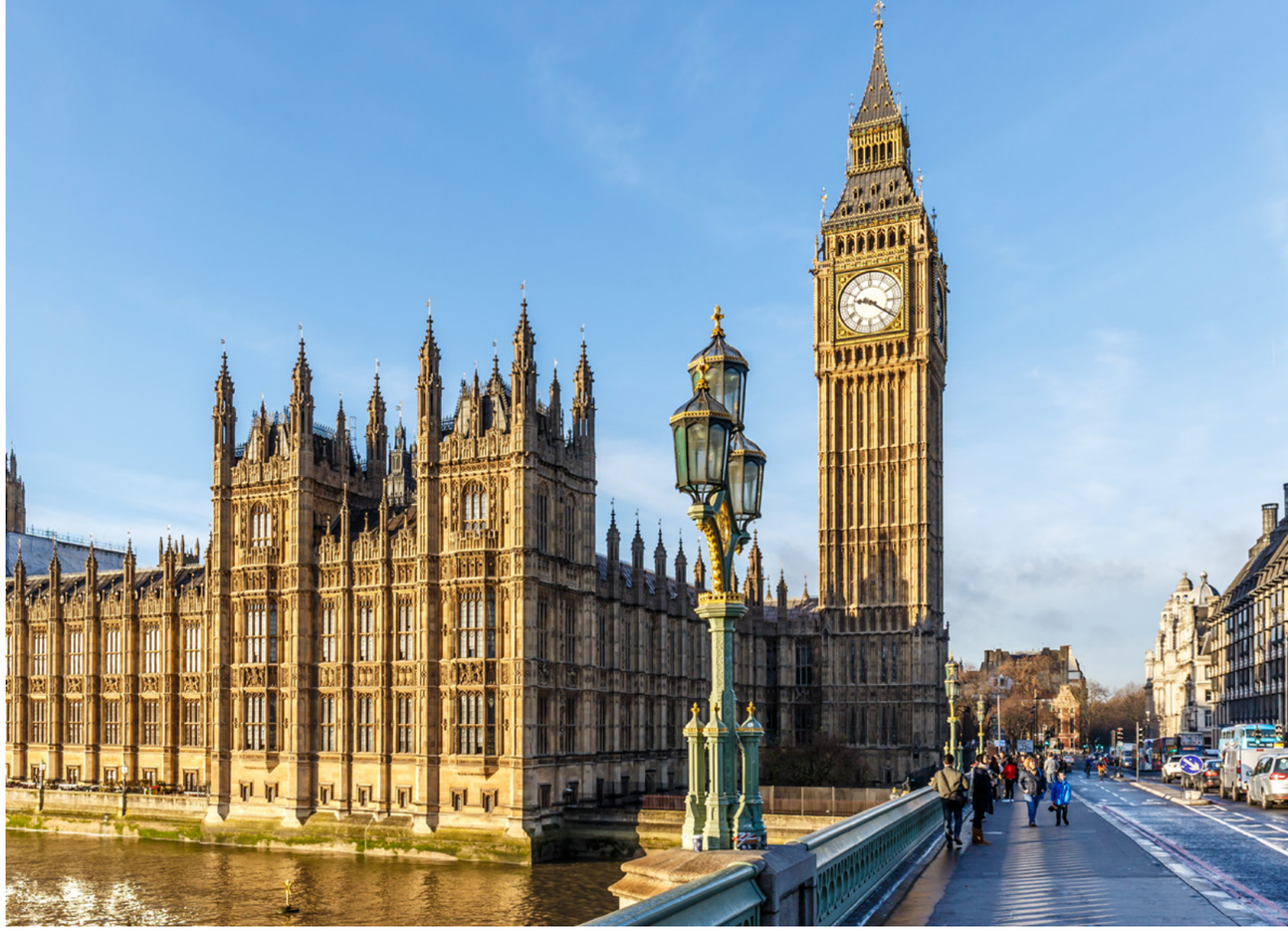
This paper sets out to explore the urgent need for further clarity and guidance in national policy to help support local decision making, one of the key recommendations from our previous report, **'Retrofit First, Not Retrofit Only'**[3]. Our analysis showed that national policy on this issue has failed to keep up with the fast-changing needs of development, amid an increasingly polarised public debate which has left local councils struggling to grapple with balancing competing demands in the planning process, including the need to deliver homes, jobs, workspaces and community infrastructure.

These obligations are enshrined in the NPPF, with local councils required to demonstrate that their plans address three objectives of sustainable development: economic, social and environmental. These are also required to include opportunities for growth.

Whilst there is a strong focus on environmental aspects, these also need to be weighed up alongside the benefits development delivers including generating social and economic prosperity. Likewise, environmental considerations need to factor in more than the carbon used in construction, such as biodiversity and the emissions generated by a building during its lifetime.

There are a multitude of judgements required during the planning process, which are increasingly complex, highly technical and rapidly evolving as technology improves. However, as a starting point it is accepted that owing to the ongoing climate crisis, sustainable and low carbon retention and refurbishment should – all other things being equal - be the highest priority for all existing buildings.

But as this paper's title implies, retrofit first should not mean retrofit only. It is much more complicated than a binary choice between refurbishment being good, and new development bad. Findings from our 2022 report show that adopting a flexible approach, including blending the two depending on the suitability of a building and the sustainable outcomes that can be achieved, is essential. But in some instances, we cannot escape the fact that some buildings are simply too low quality to merit saving, and the cost to decarbonise are simply too great to deliver, or fail to realise the benefits which new development would offer over the building's lifetime.



Extending the retention of poorly performing buildings will make it more challenging to meet national net zero carbon targets, with buildings stuck in limbo, continuing to emit more carbon than they otherwise would following redevelopment or refurbishment. These buildings, whilst also being 'stranded' from a carbon perspective, are also less desirable to occupiers and are therefore more likely to be wholly or partially vacant, with implications for local vitality and placemaking.

With greater policy clarity, including a defined way to appraise proposals across the retrofit-redevelopment continuum, the property sector will be better placed to contribute towards decarbonisation goals, whilst continuing to drive economic growth and play a key role in levelling up.

There is a clear acknowledgment from the property sector that a lack of guidance on how to navigate an increasing focus on carbon is causing significant delays in the planning system and risks stalling development, including the delivery of more sustainable buildings.

This paper reviews the existing and emerging policy, legislative and regulatory framework which shapes the planning system and its ability to effectively consider retrofit and redevelopment. It also examines the legislative system surrounding carbon in the built environment and how this is incorporated into local planning policy. A review of legislation relating to the historic environment also forms a significant part of this report, due to the complex interplay between carbon emissions reduction and heritage conservation.

The report findings and recommendations are also underpinned by development case studies submitted to the London Property Alliance (LPA) combined with wider input from the LPA membership, industry feedback, and Savills' knowledge of projects and proposals completed or underway across England.

Key findings

1 A crucial gap in national policy

There is no national policy guidance on how to determine if and when demolition and redevelopment provides greater holistic benefits than retrofit. This risks planning decisions taken on the basis of carbon emissions at the expense of other benefits of sustainable development.

The NPPF identifies that to achieve sustainable development, the planning system's three overarching objectives (economic, social and environmental) must work interdependently and need to be pursued in mutually supportive ways. However, there is no guidance on how planners should assess or strike a balance between carbon emissions, other environmental benefits and social and economic impacts when determining if retrofit or redevelopment is most appropriate.

2 Heritage policies currently unaligned to carbon reduction objectives

Within national planning policy, there is no clear guidance on how sustainability considerations should be balanced against any harm caused to the significance of relevant heritage assets as a result of retrofit proposals, creating significant uncertainty in decision-making.

This is exacerbated by a lack of consensus amongst historic environment professionals with regard to best practices when undertaking sustainability upgrades to historic buildings, or whether such upgrades should be undertaken at all. Better guidance, including the identification of heritage compliant interventions would enable owners to maximise the impact of their retrofit interventions and reduce operational carbon emissions.

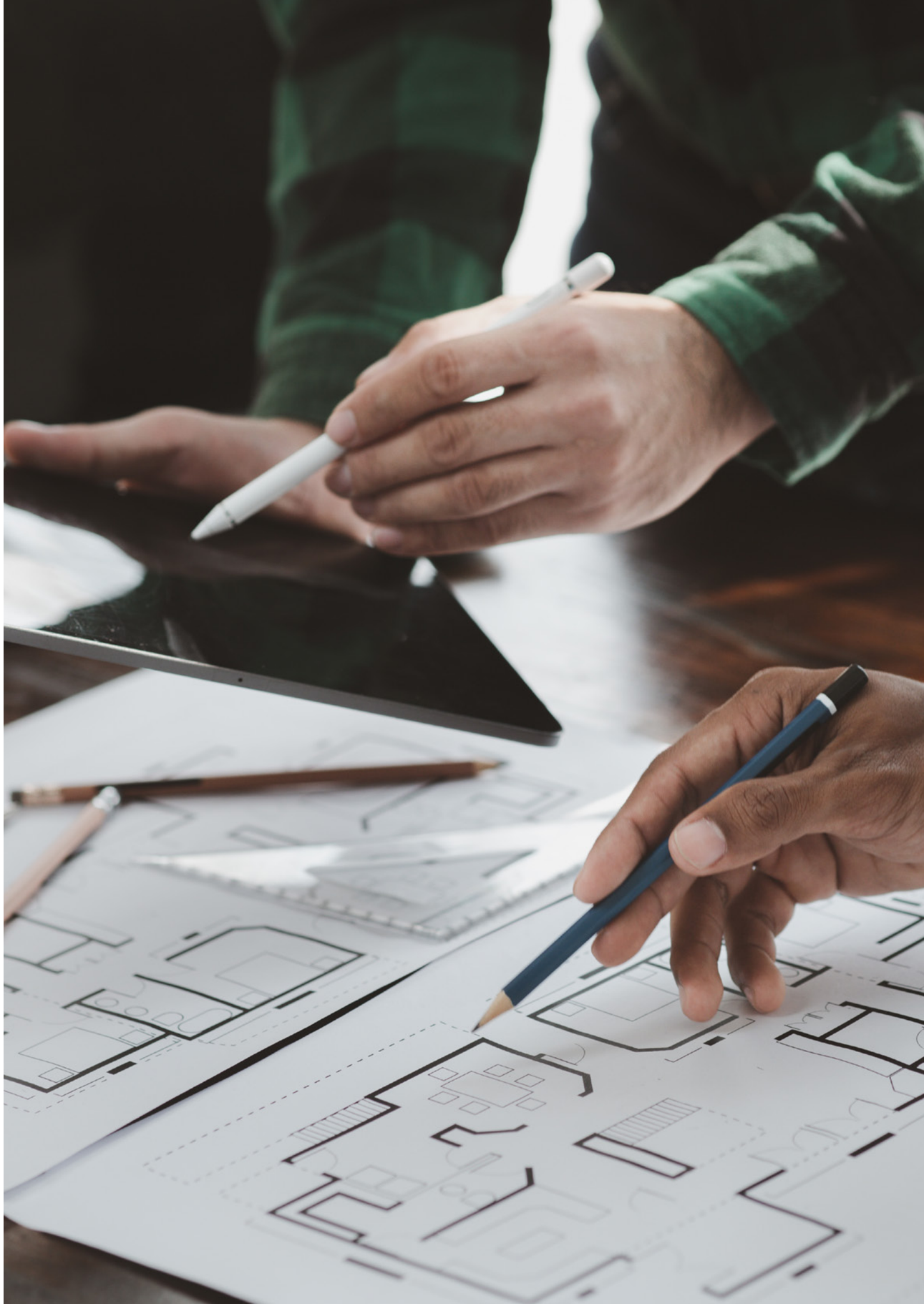
3 Planning policy for embodied and whole-life carbon emissions is limited and fragmented, and only exists at a local, and in London, regional level

The current planning system lacks consistent national policy or guidance on how the industry should calculate whole-life carbon emissions (the term used to describe greenhouse gases emitted during a building's lifecycle), or how to apply them to planning decision-making by local authorities.

Whole-life carbon emissions calculations are often unverified and untested, with little opportunity for third-party review and subsequent assurance of delivery.

4 Inconsistent decision-making

The retrofit and redevelopment debate has become highly politicised and the real estate industry is seeing this play out as major planning applications make their way through the planning process. LPA members cited examples of where applications had been delayed or at risk of refusal, denting confidence in the planning process.



Industry feedback - a snapshot

Responsible owners invest in their buildings and communities for the long term, and accordingly require a stable policy and decision-making environment to be able to innovate and plan for the future. This includes the planning needed to undertake the energy efficiency interventions required to meet net zero carbon targets.

With this in mind, approximately 100 LPA members were surveyed about their experience of the policy environment, planning system and decision-making in relation to retrofit and redevelopment proposals. The results revealed an overwhelming consensus among members for the need for nationally applied guidance, along with the below key insights.

91%

agreed that the provision of nationally applied, standardised guidance on how to assess retrofit and redevelopment design options would be beneficial for the development and planning sectors.

17%

had chosen not to purchase a site or put forward plans for development because of uncertainty over how it was going to be assessed.

41%

had experienced delays in the pre-planning process due to a lack of clarity around retrofit and redevelopment.

71%

had used whole-life carbon emissions calculations during the pre-application process to compare retrofit and redevelopment options. **76%** of these used the results to decide whether to redevelop or retrofit.

Members cited the following **had impacted their own decision making** on development:

- Planning decisions taken without the right national or local policy framework in place or contrary to existing guidance.
- Political pressure in the wake of the former Secretary of State for the Department for Levelling Up, Housing and Communities' (DLUHC) decision in 2023 to refuse the redevelopment of Marks & Spencer's Marble Arch store on Oxford Street.
- Case studies or examples where demolition projects had been delayed or at risk of refusal.

Despite the overwhelming desire for national policy to catch up and provide clarity, the City of London Corporation's **Carbon Options Guidance** was cited as an example of best practice which local authorities should seek to emulate in the meantime.

Key recommendations

1 Introduce a supplementary model for assessment

Introduce a **supplementary retrofit optioneering model for the assessment of retrofit and redevelopment** at a national level. This model for assessment will provide the parameters for appraisals throughout the planning process and facilitate a standardised approach. This seeks to ensure that economic, social and other environmental benefits are being considered in addition to carbon emissions when evaluating the appropriateness of retrofit or redevelopment.

The model will enable planners and politicians to fully understand the nuances, compromises and trade-offs made when taking forward a development. The framework will:

> Encourage an improved assessment of the appropriateness of retrofit or redevelopment against the delivery of all three objectives of sustainable development;

> Provide a consistent approach to the appraisal of development design options as part of the pre-planning process;

> Provide a thorough and transparent assessment of the framework for an agreed, fixed number of development design options during the pre-planning process.

2 Make whole-life carbon calculations and assessments a national requirement

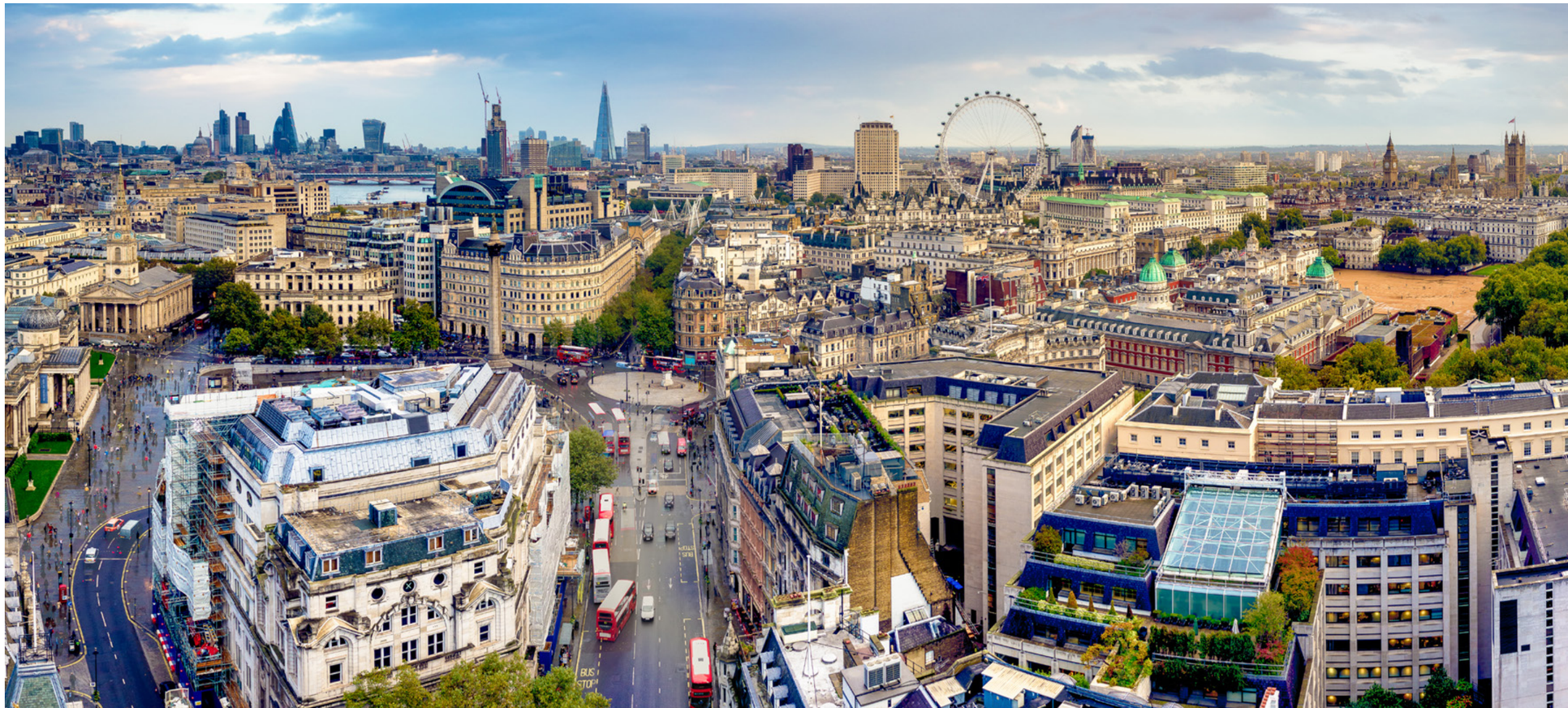
Existing national building regulations should be amended **to require and standardise the reporting of whole-life carbon emissions of buildings in line with existing RICS guidance and BRE approved whole life carbon tools.** This should include a nationally-agreed method of calculation of whole-life carbon. A holistic climate policy which specifically relates to whole-life carbon emissions assessment for retrofit and redevelopment options should be included in any forthcoming set of National Development Management Policies.

3 Make the sustainable retrofit of our historic environment a public benefit

Provide clarity in existing guidance on how to balance the conservation of the historic environment, and the need to decarbonise listed buildings, non-designated heritage assets, and buildings within conservation areas. This includes **listing justified sustainability upgrades to heritage assets as a public benefit** to be balanced against harm arising from a proposed development.

4 Maximise incoming national policy

Include firm guidance on how planning authorities should assess and balance the socio-economic and environmental benefits that a retrofit or redevelopment proposal may provide in the forthcoming National Development Managements Policies, which are to be introduced as part of the Levelling Up and Regeneration Act 2023 and will take primacy over local policy.



PART 2

A new model for local decision-making

02

CHAPTER SUMMARY

- Builds on a key recommendation of the report
- Provides initial detail of a proposed new retrofit optioneering assessment model

A new model for local decision-making

Retrofit optioneering assessment model

A new retrofit and redevelopment assessment model has been developed by the LPA to address the gap in national planning policy guidance. This will support local planning decision-making, primarily during the pre-application process, as this is when the design team has the greatest ability to consider retrofit and redevelopment design options. However, it is also designed to be used and referenced throughout the planning process.

The model should be robustly, consistently, and transparently considered for all development options during the pre-application process. By following this procedure, a wider range of economic, social, and environmental sustainability considerations are set out to inform the decision-making process, thereby reducing the number and scope of different design options to be assessed by applicants. Although individual schemes vary in their approaches to retrofit or redevelopment, our last report demonstrated that there are often a number of potentially viable design solutions.

The retrofit optioneering model overview

What are our constraints and opportunities for this site?

Site
- Existing buildings
- Site location and connectivity
- Heritage/cultural context
- Local community/socio-economic context

What outcome(s) do we want to achieve?

The Proposal
- Mix of uses
- Floor areas/ no. of units/dwellings
- Target users/audience
- Structural/façade condition (existing buildings)

Statutory Reqt's
- Fire strategy
- Energy/overheating/ ventilation/performance
- Planning policy requirements
- Accessibility
- Heritage Listed Status and Conservation Area Status

Building and urban design
- Design and character
- Layout
- Public realm/placemaking
- Building structure
- End of trip facilities

Heritage
- World heritage sites
- Impact on non-designated heritage assets
- Impact on seting of heritage assets

Viability
- Developer viability
- Occupier viability
- Whole-life value

What is the impact of these strategies on our key outcomes?

Environmental Impact
- Whole-life carbon
- Biodiversity/urban greening
- Climate resilience
- Air quality
- Circular economy
- Adaptability and flexibility
- Grid capacity

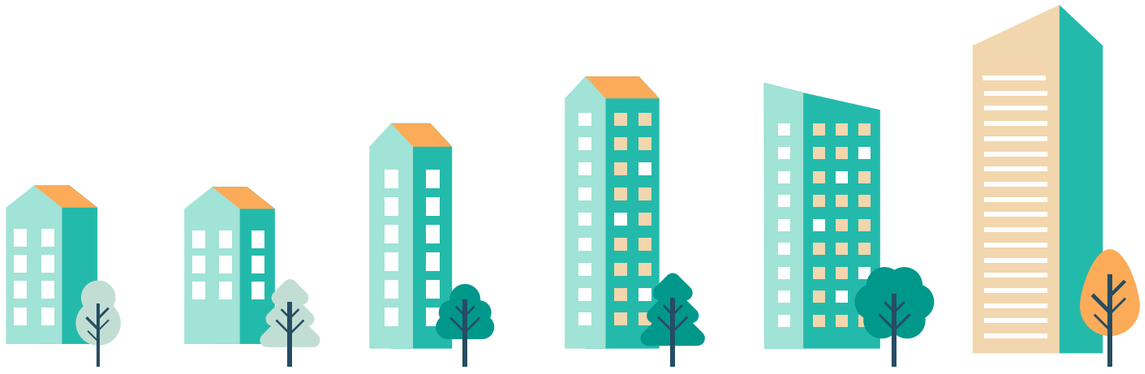
Socio-Economic Impact
- Gross value
- Health and wellbeing
- Jobs, skills and training
- Social value benefits
- Community cohesion
- Overall cost benefit

Delivery Strategy
- Construction stage impacts
- Community engagement
- Decanting strategy
- Stakeholder engagement

These issues may need to be considered in retrofit/ rebuild options

The retrofit optioneering process

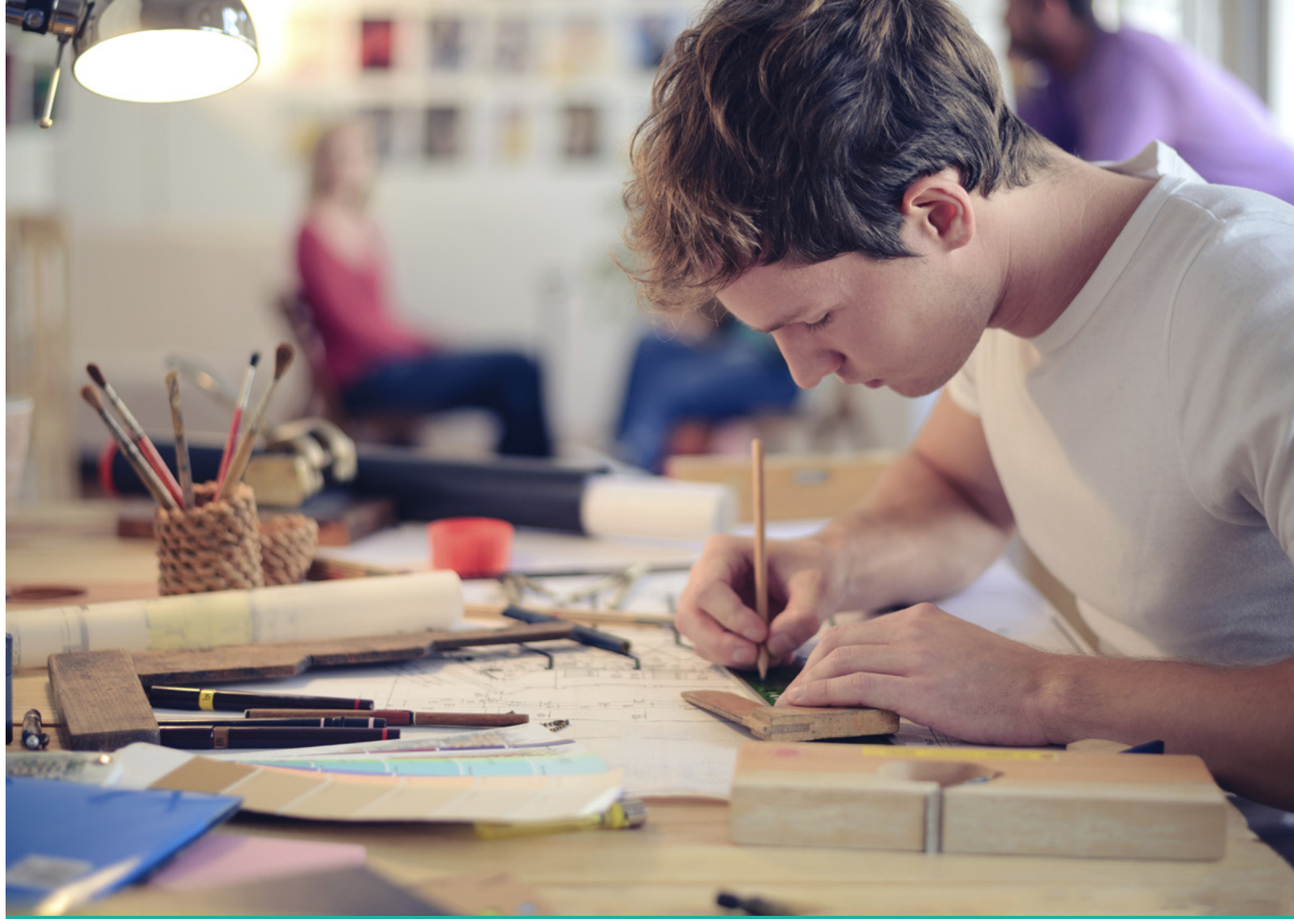
In order to provide a meaningful analysis, a comparison conducted at the pre-application stage could include a selection of the following:



During the pre-application process, it is not envisaged that a detailed assessment of all environmental, social and economic issues would be required; as this would overly complicate the process with additional information that would follow as part of a planning submission. Nonetheless, it would be expected that a comparable assessment of issues for different development options would be set out to assess the holistic sustainability benefits and impacts of emerging schemes as design options are explored.

At this stage, it is not expected that all issues would carry an equal weighting in assessment, as each site comes with its own constraints and opportunities, and applying weight to different issues would be overly proscriptive and constrain the intent of the framework as being an informative design evaluation tool.

Applicants and local planning authorities should also consider the use of third-party technical reviews to verify that impacts and benefits have been correctly identified and determined. This could consist of an expanded role for Design and Quality Review Panels.



STEP 1

Constraints and opportunities mapping

In keeping with current approaches to pre-application meetings, it would be expected that the applicant would provide information on the current site context, based on planning, design, heritage, environmental and socio-economic inputs.

STEP 2

Design proposals and target outcomes

A description of each of the design proposals being considered should follow before the benefits and impacts of each of the various issues are addressed.

STEP 3

Check statutory requirements

Design teams and local planning authorities should also be satisfied that all statutory requirements can be met by the proposed design, and that these measures can be delivered without impacting on scheme viability.

STEP 4

Scheme-specific considerations

Each proposal will have its own set of scheme-specific issues which must also be considered. Key questions that should be answered for each issue have been detailed overleaf (pages 32 & 33).

STEP 4

Retrofit optioneering check list and considerations

Building and urban design

- ✓ Does the design of the building meet modern expectations?
- ✓ Can the building be adapted to provide the required internal spaces?
- ✓ How can the public realm and placemaking be improved?
- ✓ Are the end of trip facilities in line with occupier expectations?
- ✓ Has the existing structure come to the end of its safe lifespan?
- ✓ Is the building structurally sound to support additional floor space?

Heritage

- ✓ If the site is a heritage asset, what is its significance, what degree of change can it tolerate in terms of impacts on significance for both statutory and non-statutory designations, and what is its optimum viable use?

Socio-economic impact

- ✓ How much economic benefit will the scheme provide at a national and local level?
- ✓ Will the scheme improve the health and wellbeing of occupants and neighbours?
- ✓ What commitments can be made to local jobs, skills and training?
- ✓ What other social value benefits will the scheme provide?
- ✓ How will the project contribute to community cohesion?
- ✓ Can the overall socio-economic benefits be quantified and compared for different options?

Environmental impact

- ✓ Can the existing building be upgraded to be energy efficient or would a rebuild provide a more energy efficient building, saving carbon emissions over the longer term?
- ✓ Can the existing building provide the same biodiversity and urban greening benefits as a new building?
- ✓ Is the existing building able to tolerate anticipated changes to the climate?
- ✓ What elements of the existing building can be reused or repurposed, either onsite or elsewhere?
- ✓ Can the building be adapted to accommodate a different use and be made flexible to adapt to changing market circumstances?
- ✓ Is the local grid capacity sufficient for the building to adopt an ‘all-electric’ approach?

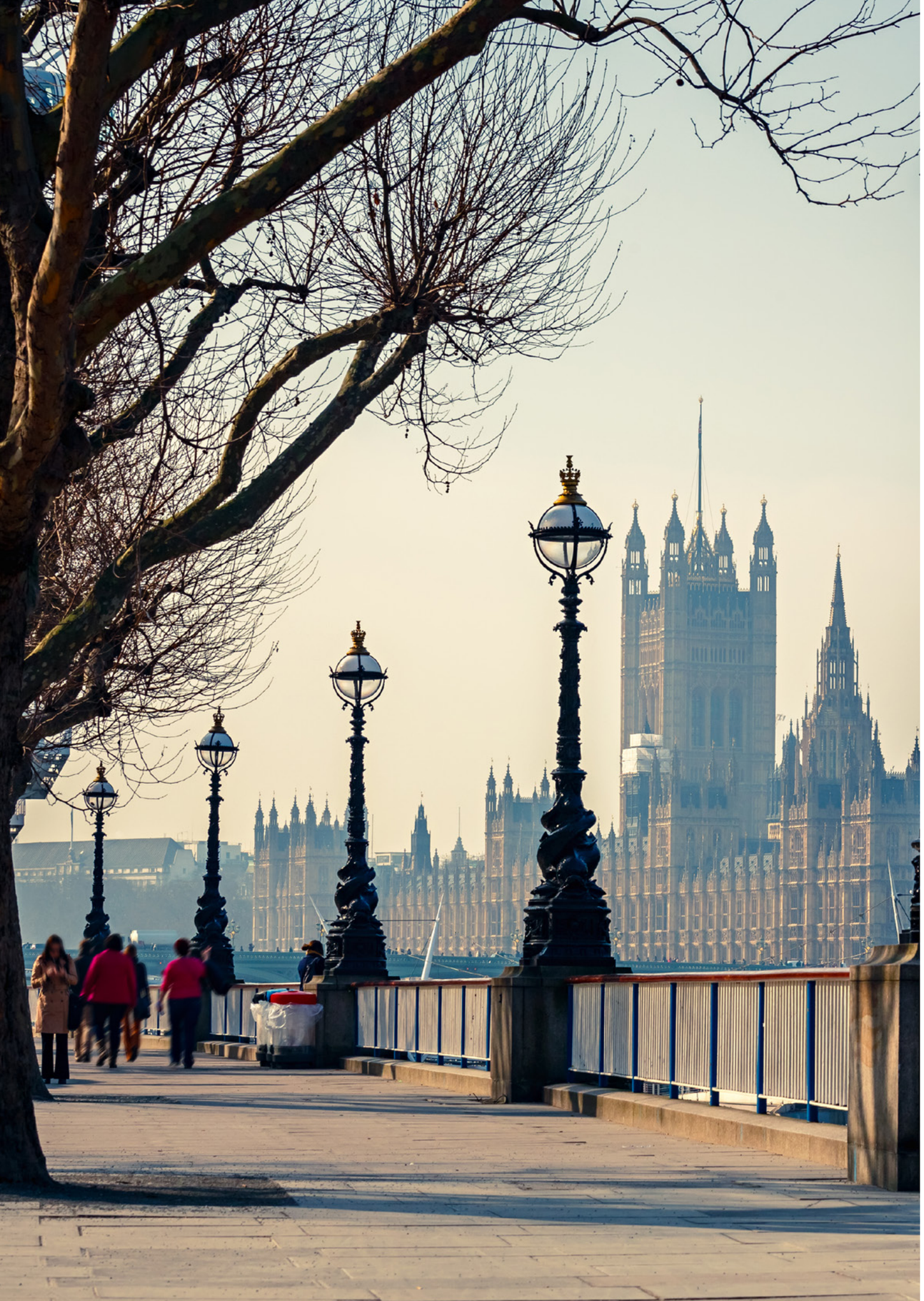
Viability

- ✓ Will the retrofitted building be able to attract users, tenants and occupiers or will the space remain sub-optimal?
- ✓ How will incorporating all of the relevant economic, social and environmental sustainability objectives impact on viability for both developers and occupiers?

Building and urban design

- ✓ What construction stage impacts have been identified and how will they be mitigated?
- ✓ How will communities and other stakeholders be engaged in the project, and how will their feedback contribute to meaningful design optimisation?

*↗ A description of each of the proposed issues, together with relevant assessment guidance, is provided in **the appendix**.*



Implementation of the model

Proposed changes to the NPPF

In order to implement the proposed model at a national level it is recommended that the NPPF includes a positive paragraph that supports exploration of retrofitting buildings first before considering their demolition to support the three objectives of sustainable development. Consideration of the whole-life carbon emissions of a scheme should be factored into the assessment, as well as the social and economic benefits associated with retention and demolition.

It is therefore proposed that paragraph 157 of the NPPF be updated to state the following:

> The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the **feasible** conversion of existing buildings, **accounting for the three objectives of 'sustainable development';** and support renewable and low carbon energy and associated infrastructure.

Updating the Planning Practice Guidance (PPG)

To implement the model effectively, it will need to be added to the PPG as it provides important context to the NPPF and supports the plan-making and decision-taking process. Doing so will provide a standardised, consistent and transparent methodology in order to compare and evaluate the relative benefits and impacts of emerging design options.

Increasingly, applicants are being asked to present a number of design options during the planning process to demonstrate how it made its decision to opt for retrofit or a redevelopment. In order to allow flexibility, we would encourage applicants and local authority planning case officers to discuss and agree this at the outset, rather than setting a fixed number or type of design options.

Regardless, the proposed model should ensure that a range of different refurbishment options are robustly considered, alongside any new build proposals in order to derive minimum environmental impacts, whilst maximising social and economic benefits. The model should also include clear definitions on how minor and major refurbishment, together with partial demolition are defined in a planning context.

The content of policy within the forthcoming National Development Management Policies (NDMPs), and that of the PPG, will need to be kept under review, as aspects of the emerging model may be better addressed within the NDMPs.

PART 3

Wider recommendations & conclusion

03

CHAPTER SUMMARY

- Wider report recommendations in detail
- Conclusion

Wider recommendations

In addition to the recommendations surrounding the development and implementation of the supplementary Retrofit Optioneering Assessment Model discussed earlier in the paper, this report also makes the following recommendations.

Make whole-life carbon calculations and assessments a national requirement

Amend national building regulations

Existing national building regulations should be amended to require and standardise the reporting of whole-life carbon emissions of buildings in line with existing RICS guidance and BRE approved whole-life carbon tools. This should include a nationally-agreed method of calculation of whole-life carbon.

Currently, the best means of achieving this is through the implementation of the industry proposed Building Regulations Part Z[4] as part of the Carbon Emissions (Buildings) Bill[5]. This will also support the work that the construction industry is undertaking to meet the Government's legally binding net zero target of 2050, by assessing and reducing both embodied and operational carbon emissions.

Following the 2022 updates to Building Regulations Part L[6], and forthcoming amendments predicted to be implemented in 2025 as part of the Future Homes Standard[7], planning authorities need to update their planning policies and related carbon reduction targets for new and existing buildings.

The phasing out of fossil fuels and implementation of all electric buildings is not currently accurately reflected in assessments of a building's carbon impact. In recent years the national energy grid has reduced its reliance on fossil fuels, with wind, solar and green alternatives now accounting for a larger proportion of the energy produced. Indeed, over the past 14 years (2010-2024) the fossil fuel component of the National Grid has decreased by 69.6% from 0.490 CO2e/kWh to 0.149 CO2e/kWh.

Utilise forthcoming National Development Management Policies (NDMPs)

National Development Management Policies, which are due to be brought forward as part of the Government's Levelling Up & Regeneration Act, should include a specific requirement to calculate whole-life carbon emissions as part of the planning process.

Any embodied or whole-life carbon emissions targets set as part of Building Regulations or National Development Management Policies should be nationally derived and aligned to ensure the delivery of the Government's legally binding net zero 2050 target. They should also consider the socio, economic, and environmental benefits that may result when considering whether retrofit or redevelopment is most appropriate.

It is recommended that these targets should apply to major planning applications, and not to minor planning applications, which are defined as:

- Residential development of between one and nine dwellings
- Development where the floorspace is less than 1,000 sq m
- Development on sites less than one hectare
- Changes of use less than 1,000 sq m.

Make the sustainable retrofit of our historic environment a public benefit

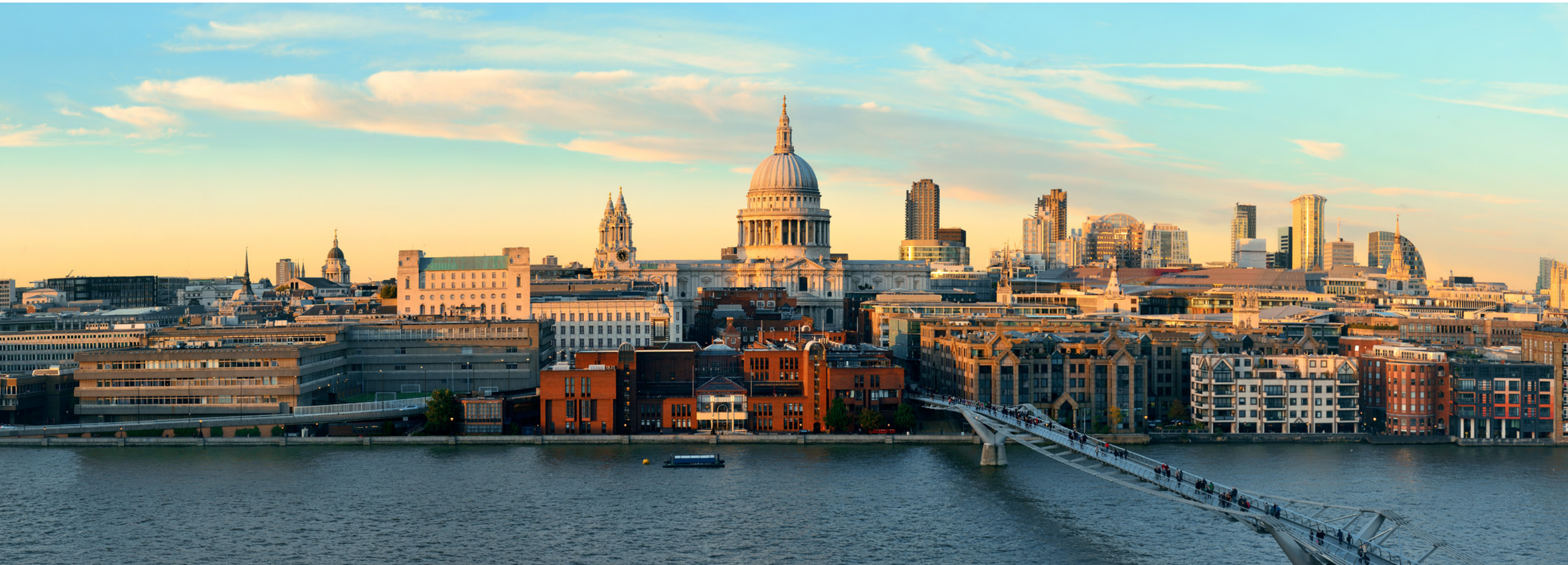
The lack of clarity and nuanced policy concerning the balance between the protection of heritage assets and appropriate sustainability upgrades to these assets, is restricting the potential retrofit of such buildings. Whilst the retention of historic buildings reduces the need to rebuild and therefore reduces embodied carbon emissions, it should be recognised that without effective, energy focussed refurbishment, these buildings will be responsible for high levels of operational carbon emissions in their current state.

There is currently no clear reference to how sustainability considerations should be balanced against any harm caused to the significance of relevant heritage assets as a result of retrofit proposals, in either the NPPF or any other statutory policy and guidance.

In respect of the historic environment, the current NPPF is actually weighted in favour of conservation over mitigation for climate change but amendments to the NPPF to better align heritage and sustainability could cut operational carbon emissions by up to 7.7 MtCO2 per year, equivalent to 5% of the UK's carbon emissions associated with buildings, based on 2019 levels[8].

The NPPF should be updated to explicitly state that well considered and justified sustainability upgrades to heritage assets should be considered a clear and meaningful public benefit to be balanced against any harm arising from a proposed development. This could be achieved through a simple addition to Paragraphs 203 and 204, whereby sustainability upgrades could be added alongside optimum viable use as an explicit example of an important public benefit when proposals affect heritage assets.

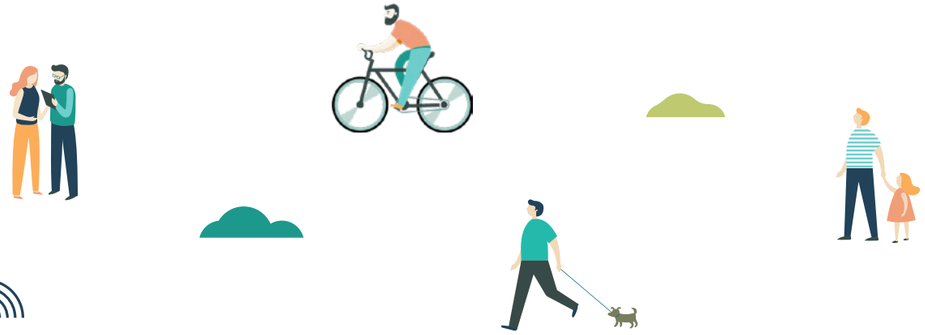
Further consideration should be given by both industry and government on how to balance the need to protect our historic environment with the need to reduce our carbon emissions.



Conclusion

In order to mitigate the worst impacts of climate change, we have to make decisions on how best to use a limited carbon allowance in order to deliver growth and associated social benefits.

This is being played out across the country, with very little consistency in how different projects are assessed. Our analysis of the industry and real world experiences of the pre-planning process has demonstrated that practitioners would benefit from clearer guidance on how to address these issues, due to inconsistency in guidance at a national and local level.



This inconsistency leads to uncertainty which has a number of significant impacts:

- Delays to the planning process, increasing the resource requirements from local authorities;
- Increasing costs to the design process;
- Slowing down the delivery of new commercial and residential floor space needed for economic growth;
- Some buildings emitting more operational carbon emissions throughout their lifetime;
- Limiting the industry's ability to deliver social benefits to local communities;
- Reducing the speed at which we can improve placemaking and create vibrant social spaces;
- Ultimately jeopardising our ability to meet our national 2050 net zero carbon target.

This paper demonstrates that there is a need for consistent and holistic national planning policy and guidance to compare retrofit and redevelopment options, which can then be implemented at a local level. As such, we require additional guidance within the existing planning and legislative framework to ensure the buildings we're planning for today are compatible with our net zero commitment. A number of policy amendments have been proposed which would strengthen and align the fragmented approach to carbon emissions assessment, and how this is applied in the retrofit context. A supplementary retrofit optioneering model, covering a wide range of key considerations, has also been proposed.

The implementation of these recommendations would lead to a number of desirable outcomes:

Faster delivery of new homes and business spaces to support growth and levelling up. Fewer planning delays and decision appeals will lead to more homes and more jobs.

Reduced burden on local authority planning teams. A consistent assessment model will reduce the amount of time needed by case officers to compare design alternatives.

More social value delivered to communities. Communities will benefit from more inclusive placemaking, better stakeholder engagement and employment opportunities.

More rapid decarbonisation of buildings. Older, more carbon intensive buildings will be refurbished or replaced at a quicker rate.

Protection of historic buildings. Our built heritage will be secure, whilst allowing appropriate sustainable refurbishment to take place.

Glossary

Carbon or GHG intensity

Carbon or greenhouse gas intensity refers to the total amount of direct and indirect GHG emissions (kgCO2) generated from energy consumption in a building over a full reporting year, normalised by an appropriate denominator (e.g., m2 floor area).

Circular economy

Circular economy refers to an economy based on the principles of eliminating waste and pollution, circulating products and materials (at their highest value) and regenerating nature. A building may be considered 'circular' if at each stage of the lifecycle it is supporting a continuous, closed loop of resources where resource is not lost or wasted.

Embodied carbon

Embodied carbon emissions are the total GHG emissions and removals associated with materials and construction processes throughout the whole life cycle of an asset (Modules A1-A5, B1-B5, C1-C4).

GHG

Greenhouse Gases are constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. Carbon-related definitions refer to GHGs with Global Warming Potentials, i.e., carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFC's), perfluorocarbons (PFC's), and sulphur hexafluoride (SF6).

LPA

Local planning authority

NPPF

National Planning Policy Framework

Operational carbon

Operational carbon emissions are the GHG emissions arising from all energy consumed by an asset in-use, over its life cycle.

PPG

Planning Practice Guidance

Redevelopment

Redevelopment involves new construction on at site that has pre-existing uses. It typically involves the full or partial demolition of the existing building to deliver a new building of a higher quality standard to meet modern occupancy requirements and, in the context of this paper, to deliver high operational energy efficiency and low or zero operational carbon emissions.

Retrofit

A building retrofit involves modifying the building's systems and/or structure after its initial construction and occupation, generally to improve amenities and comfort for building occupiers and/or increase operational efficiency by reducing utilities consumption. A low or net zero carbon retrofit involves the retrospective upgrading of a building to enable it to respond to the imperative of climate change by maximising energy efficiency and phasing out fossil fuel use to deliver low or zero operational carbon emissions.

RIBA

Royal Institute of British Architects

RICS

Royal Institute of Chartered Surveyors

Sustainability

Sustainability or sustainable development is an integrated approach that takes into consideration environmental and social concerns along with economic development. In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

References

[1]https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf

[2]https://www.gov.uk/government/publications/reforms-to-national-planning-policy-report-government-response/reforms-to-national-planning-policy-report-government-response

[3]https://www.londonpropertyalliance.com/retrofit-first-not-retrofit-only-a-focus-on-the-retrofit-and-redevelopment-of-20th-century-buildings/

[4]https://www.legislation.gov.uk/ukpga/2023/55/pdfs/ukpga_20230055_en.pdf

[5]https://bills.parliament.uk/bills/3107

[6]https://assets.publishing.service.gov.uk/media/63d8ed5de90e0773d8af2c97/Approved_Document_L__Conservation_of_fuel_and_power__Volume_1_Dwellings__2021_edition_incorporating_2023_amendments.pdf

[7]https://www.gov.uk/government/consultations/the-future-homes-and-buildings-standards-2023-consultation/the-future-homes-and-buildings-standards-2023-consultation

[8]https://www.grosvenor.com/getattachment/b1f73935-20bb-4d07-b1d7-39ea033de621/Heritage-Carbon-how-historic-buildings-can-help-tackle-the-climate-crisis-(1).pdf

[8]https://www.gov.uk/government/publications/ventilation-approved-document-f


London Property Alliance
WPA
Westminster Property Association
CPA
City Property Association