

Introduction

The Chartered Institute of Building (CIOB) is the world's largest and most influential professional body for construction management and leadership. We have a Charter to promote the science and practice of building and construction for the benefit of society, and we've been doing that since 1834. Our members work throughout Ireland and worldwide in the development, conservation, and improvement of the built environment. We accredit university degrees, educational courses and training in universities and colleges in Ireland. Our professional and vocational qualifications are a mark of the highest levels of competence and professionalism, providing assurance to clients and other professionals procuring built assets. The CIOB also has a dedicated policy and research function for Ireland, whose expertise we have drawn on in the preparation of this response.

We support the transition from our current reliance on the linear economy to better embracing the circular economy's principles. In particular, we strongly support a shift in culture and approach that encourages reuse and repair

There is a lot to be commended in the draft guidance document (the draft). Our response focuses on several key themes that, in our view, require further thought.

The tax system and the circular economy

The draft rightly points out the need to review legislation in the context of circular economy and design principles. It also suggests tax incentives for demolition 'such as for recycling...'. Given the novelty of the recommendations in the draft, a general taxonomy of all existing policy and legislation that impacts the built environment needs to be created. The proposals in the draft should then be sense checked against this taxonomy. Where contradictions are identified between the draft and existing policy and legislation, a decision needs to be made as to the correct course of action given Ireland's climate commitments.

For example, under Ireland's current tax structure, a reduced rate of 13.5% VAT is applied to demolition projects, creating a perverse environment where the embodied-carbon-hungry activities of demolition and replacement enjoy financial parity with the sustainable repair and restoration, of Ireland's built environment. This contradicts the principles outlined in the Circular Economy and Miscellaneous Provisions Act 2022, the Climate Action and Low Carbon Development (Amendment) Act 2021, and the EU Taxonomy Regulation 2020 - an EU-wide classification system for sustainable activities. This reduced rate of VAT for demolition also acts antagonistically to many of the proposals in the draft.

To remedy this, the CIOB is proposing that the Government use the tax system to incentivise the repair and restoration over the demolition of buildings, thereby reducing the embodied carbon footprint of Ireland's built environment. Specifically, we are calling for demolition to be charged at the standard rate of 23% VAT, while repair and renovation activities remain at the reduced rate of 13.5%.

37% of carbon dioxide emissions come from buildings. This means that the built environment sector has a significant role to play in achieving Ireland's net zero ambitions and tackling the climate crisis. Rather than incentivising sustainable construction practices, Ireland's VAT structure places demolition and rebuild on a parity with renovation and retrofit by charging both at the reduced rate of VAT – 13.5%. This is facilitating a culture of demolish and replace, rather than add, transform, and reuse in the construction sector.

New build projects are an essential component of the built environment, but the replacement of buildings should not be given taxation parity with repair as retrofit buildings will often outperform new

in terms of overall lifetime carbon emissions. Further, the demolition of existing buildings creates challenges such as appropriate disposal of waste, dust exposure, and greenhouse gas emissions.

Regulatory measures have proven effective in undergirding similar types of sectoral culture shifts from demolish and rebuild to repair and reuse. For instance, landfill taxes and the application of an aggregate levy facilitated a 70% decline in the amount of Construction and Demolition Waste (CDW) disposed to landfills in the UK.¹ International studies concluded that levies were more effective at CDW mitigation than financial incentives, achieving the targeted 30% reduction in CDW two years sooner and have the co-benefit of generating a new revenue stream.²

Governance

The issue of governance is crucial to a successful circular economy strategy. It is quite clear from the discussion document that the guidance will spill over into the remit of other departments – the Department of Housing, Planning and Local Government, and the Department of Finance are the most obvious, although there are others. As such, if the guidance is to evolve from a discussion document into a set of clear policies, with concrete, enforced outcomes, other government departments need to be brought on board. For instance, there is clear tension between what the guidance proposes, and the existing tax system. Has the Department of Finance (DOF) been made aware of this guidance and the potential implications it has for future budgets? What is the hierarchy between the guidance and existing policies to which it will act antagonistically in terms of policy enforcement? These questions need to be clarified at the outset of the guidance document's life.

As per the point above regarding VAT, the DOF will be a key stakeholder if the draft is to be successful. It is therefore disappointing not to see DOF named on the 'Policy-makers and State agencies' stakeholder list, albeit it is mentioned once in the draft on page 31.

Adaptable Buildings

We commend the aim to reduce future demand for new construction through design that supports adaptability, repair, and maintenance, in line with the indicators of the EU Framework for sustainable Buildings, Levels. The most significant environmental impacts of constructing a building relate to its structure and facade. If the useful life of the building, and therefore also its structure, can be extended, there can be significant environmental benefits.³

We support the idea laid out in the draft of scoring a building's adaptability to change of use. We propose that this be germane to the decision to grant planning permission. While an adaptability requirement this may be overly onerous on smaller developments in peripheral locations, implementing an adaptability score is particularly important in central urban locations, where changes in demands for building types are frequent.⁴

As per the European Commission's 'Level(s) indicator 2.3: Design for adaptability and renovation guide' a building's adaptability score can provide a semi-quantitative assessment of the extent to which the design of a building could facilitate future adaptation to changing occupier needs and market conditions. It can therefore provide a proxy for the capacity of a building to continue fulfilling its function and to extend the useful service life into the future.

¹ Lesniewska, F., [Adding value to construction and demolition waste to achieve sustainable development](#), 3 February 2022.

² Calvo, N., Varela-Candamio, L. and Novo-Corti, I., 2014. [A dynamic model for construction and demolition \(C&D\) waste management in Spain: Driving policies based on economic incentives and tax penalties](#), *Sustainability*, 6(1). 2017.

³ Eu Levels: Adaptability

⁴ See <https://www.sustrans.org.uk/our-blog/opinion/2020/june/the-role-of-construction-in-delivering-sustainable-transport-post-covid-19>

This adaptability score could be embedded in planning decisions, as part of a new development's Environmental Impact Assessment, for instance. We recommend that this scoring mechanism be introduced for all new buildings in central urban locations. The framework for such a spatially sensitive policy is already in place in national planning guidelines, which, for instance, recommend that the quantum of car parking or requirement for such provision should depend on the location of development. In central urban locations, according to Planning Guideline 28,⁵ parking provision should be minimised or eliminated, whereas in peripheral locations restrictions can be relaxed.

A similar spatial criterion could be used to implement adaptability scoring in the assessment of a planning application. New buildings in central urban locations, where demand for space changes – between office and residential, for example – could be required to achieve a certain adaptability score and this could be a factor in the decision as to whether to grant a development planning permission. This would be in keeping with national planning policy, which prioritises dense, mixed-use development, as well as offsetting the need to repeatedly reproduce the most significant environment impacts of construction – the structure and façade of a new building. By providing a score for adaptability, developers, local planning authorities and communities will be presented with clear options to take a longer view on the design aspects and decisions that may influence the building's service life.

Demolition Audits

Given the scale of building and demolition taking place in Ireland's cities, creating a publicly accessible inventory of the materials available from a building prior to its demolition could be a useful way of connecting planned building projects to demolition projects such that optimal use is made of materials that will otherwise end up in landfill. CIOB advocates for pre-demolition assessments in our work on sustainability. Pre-demolition assessments can establish an unbiased, qualified appraisal of a building's viability, presenting the environmental and economic case for its repair or replacement. A pre-demolition assessment would be an ideal opportunity to provide a publicly accessible inventory of the materials and resources available in the planned demolition project. Further, these inventories could link in with community development projects locally to support community building projects. This link could be given regulatory footing using the Office for Government Procurement's implementation of social clauses in their work with the construction sector.

Preserving and improving our existing built environment is a critical component of meeting our sustainability targets, fuelling our economy, creating good jobs and preserving our heritage. However, centralised policy making rarely maps neatly to local circumstances. In some cases, demolition and rebuilding will be the right choice economically, environmentally, and socially. Establishing when this is the appropriate course of action, however, is challenging. Like many other areas of the construction industry, there is a role to be played by suitably qualified property professionals in assessing and charting the most sustainable and practical course of action at the potential end of a building's life.

Two processes may offer solutions to these practical challenges. The first is to engage pre-demolition assessments to establish an unbiased, qualified appraisal of a building's viability, presenting the environmental and economic case for its repair or replacement. These assessments would support a transition to prioritising retrofit while remaining practically minded and responsive to each construction project's individual needs and unique characteristics. The flexibility of the built environment should be prioritised so that buildings can reach their full life expectancy through being

⁵ See <https://www.opr.ie/wp-content/uploads/2019/08/2018-Design-Standards-for-New-Apartments-1.pdf>

repurposed. It is nonetheless important to recognise that, in some cases, this will not be practical or possible.

In cases where demolition is an appropriate course of action, waste audits conducted by external auditors ahead of demolition could further support the mitigation of Construction & Development Waste (CDW). Research has demonstrated that pre-demolition audits are an 'effective tool for enhancing CDW management practices'.⁶ In some cases, an internal version of these audits is already in use. However, the practice has not been widely adopted. Further, concerns have been raised regarding self-regulation. Considering these limitations there is a need for mandatory auditing systems that don't rely upon the industry's self-policing but rather engage with specialised staff with the necessary training to provide objective assessments and oversee waste management practices.

Implementing these assessment and auditing systems could further support redressing the imbalance between replacing and repairing buildings in Ireland⁷ and support transitioning to the principles of the circular economy. However, these systems will require upskilling industry professionals to understand better CDW practices and the recycling and reuse of materials

Resourcing

The draft mentions a lot of new duties, some loaded onto the planning system. There needs to be an accompanying resourcing strategy with the guidance this if this is the case, otherwise the guidance will simply be giving more responsibilities to an already stretched local government sector.

Skills, professional development, and professional bodies

The draft points out the role that professional bodies, including the CIOB, will play in upskilling the workforce for a circular economy. The CIOB Academy already offers courses in the circular economy, which introduce circularity and how it works in the built environment. A panel of speakers from both Industry and Government cover varied topics including Buildings as Material Banks (BAMB) and how the public sector is facilitating circular economy, how the idea is applied to buildings and the policies that are coming into play. We would be happy to provide a more in-depth overview of the other training courses that we offer to members if you think this would benefit that work that you are doing in DECC.

Furthermore, the draft talks about introducing a Building Regulations Advisory Body, consisting of members of various stakeholders, e.g., RIAI, Engineers Ireland, Irish Planning Institute etc. We would respectfully suggest that such a group could benefit from having a more international flavour given the progress that has already been made in terms of circular construction policy in other countries. The CIOB partnered with the Construction IT Alliance (CITA) to run a circular economy series throughout 2021 featuring a range of international speakers. We would be happy to discuss potential candidates for this advisory body from our contributors to that series.

Further research

The draft talks about facilitating future research into a circular construction sector. In terms of the CIOB's proposal to charge demolition at the full rate, following our proposal for a demolition levy in Scotland, the CIOB has met with the Minister for Net Zero Buildings, Active Travel and Tenants' Rights to organise that Scottish Government officials undertake a feasibility study in regards to the demolition

⁶ See

<https://upcommons.upc.edu/bitstream/handle/2117/361629/TLALR1de1.pdf;jsessionid=B2075B910917F734FE4DE082F89DA8D1?sequence=1>

⁷ See <https://passivehouseplus.ie/articles/design-approaches/deconstruct-ireland>

levy proposed in our ‘Levelling the playing field, not Scotland’s built environment discussion paper’.⁸ This study will explore possible models for implementation and administration, clarify the number and scale of demolitions undertaken in Scotland each year, and, from there, identify the possible revenue that could be generated from the adoption of the levy. We would be happy to work with DECC to organise a similar study in Ireland to assess the feasibility of a change to VAT on demolition.

Material Passports

The CIOB has done extensive work on building information, including a 2022 survey on the ‘golden thread’. Almost three-quarters of respondents to a CIOB survey on the ‘golden thread’ – the requirement for accurate and up-to-date records of project data – said it should apply to all buildings, not just the higher-risk residential buildings as set out in the UK government’s draft Building Safety Bill.

The research, carried out by the CIOB and software company i3PT Certification, asked industry professionals about their understanding of the golden thread and how it will be delivered in practice. 74% of respondents felt the draft bill did not go far enough, and that the golden thread should become law for all buildings, while a further 13% said it was ‘relevant’ to other sectors. Many were concerned about healthcare, care homes and schools. The research indicated that industry culture would be the biggest obstacle to implementing the golden thread. Some 82% of respondents picked this out as a ‘blocker’ to change, followed by commercial investment (52%), lack of repercussions (48%), unclear requirements (43%) and technology (32%). Furthermore, more than half (54%) agreed with the statement, “the industry understands the need to change but the right culture is not in place to support it”. Only 9% disagreed.

The consensus is it will take construction a long time to implement the changes necessary to deliver a golden thread of information on all high-risk projects. Only 7% of respondents thought it would take less than 12 months, while one in five said it would take between one and two years. Some 41% thought it would require two to five years and 23% said over five years. Encouragingly though, 85% of survey respondents said the golden thread will “enable better decision-making and create a clearer chain of accountability across the built environment”. The ‘golden thread’ was identified by Dame Judith Hackitt in her Independent Review of Building Regulations and Fire Safety, published after the Grenfell fire. She highlighted the need for “robust record keeping, with a digital ‘golden thread’ of key building information running through all phases of design, construction and occupation”.

We would be happy to discuss this submission in more detail.

⁸ See <https://www.ciob.org/industry/policy-research/levelling-playing-field>