IRISH GREEN BUILDING COUNCIL'S PRE-BUDGET SUBMISSION 2023

Towards a fully decarbonised built environment

ABOUT THE IRISH GREEN BUILDING COUNCIL

The Irish Green Building Council (IGBC) provides leadership for a sustainable built environment. IGBC is a registered charity with over 300 corporate members drawn from all parts of the value chain, from occupiers, design professionals, contractors, suppliers, academics and public authorities and affiliated with a global network of 70 national councils within the World Green Building Council. This allows us to create workable solutions and tools to deliver transformative change towards a sustainable built environment. The Irish Green Building Council also is the national partner of the Renovate Europe campaign in Ireland.

This submission was developed in close cooperation with our members. A series of workshops were organised between December 2021 and June 2022, with a final workshop taking place on Friday, 24th June. These were attended by developers, contractors, building professionals, investors, researchers, and construction product manufacturers.

BACKGROUND INFORMATION

The Climate Action & Low Carbon Development (Amendment) Act (2021) set a new legally binding target of a **51% reduction in national CO_2eq emissions by 2030** and an overall target of a **climate neutral economy by 2050**. In times of climate and biodiversity emergency, **all government's expenditure and fiscal policies must align with these objectives**.

The built environment cross-cuts carbon emissions from all sectors, including energy, transport, industrial processes, and land use changes. Research commissioned by the IGBC to the Building in a Climate Emergency (BIACE) Research Lab at the UCD School of Architecture, Planning and Environmental Policy indicates that **37% of Ireland's national emissions are linked to the construction and operation of our built environment**, the same as agriculture. This 37% is made up of 23% operational emissions associated with the energy we use to heat, cool, and light our buildings and a further 14% embodied carbon emissions from the production of construction materials, transport of materials, construction process, maintenance, repair and disposal of buildings and infrastructure. Projections to 2030 show that the national retrofit scheme and energy efficiency improvements in new build (NZEB standard), alongside a decarbonising grid, will drive operational emissions down in the next decade, however, new construction outlined in the national development and housing plans will lead to a significant increase in embodied carbon, effectively negating the savings in operational emissions[1].

The recommendations included in this submission were developed to address whole life carbon (WLC) emissions in the built environment, taking into full consideration other pressing issues such as the housing crisis and high inflation in construction. **Tackling emissions associated with the built environment is critical to reach our 2030 climate targets, but also to protect the most vulnerable in society against energy price increase.**

The IGBC believe that a full set of coordinated actions are required to address whole life carbon in the built environment. For instance, policies, regulation, and tax incentives must be fully aligned to make reuse of existing buildings easier. This submission should hence be read alongside IGBC's draft recommendations to decarbonise Ireland's built environment (read more).

[1] The carbon modelling study is available here.

We set out our comments as follows, actions required to encourage a better use of the existing stock and energy renovation, actions to ensure new homes are truly sustainable and support a low carbon lifestyle, and actions to support the development of a low carbon construction materials industry.

SUPPORTING A BETTER USE OF THE EXISTING STOCK

Rational: The 2022 census shows that 166,000 properties are vacant in Ireland, with over 48,000 vacant for six years or more. However, recent studies from the Collaborative Town Centre Health Check (CTCHC) Programme show this is only the tip of the iceberg. CTCHC land use surveys (Step 2 of a 15- Step assessment process) highlight that the ground floor commercial vacancy rate in towns in Ireland is 18-31% - the normal target at a European level is 5%. The upper floors in towns are at c. 80% - both these levels are unheard of in a European context[2].

By bringing these properties back into use through high quality renovations we can tackle several challenges at once. As highlighted in the carbon modelling report commissioned by the IGBC to UCD, better using our existing stock and prioritising re-use is critical to reach our 2030 climate targets: The carbon cost of a home deep retrofit is approximately ~0.25 of that of new build, and as many of these homes are located in central locations, people would be less reliant on cars, which in turn would reduce our fastest growing source of carbon emissions, transport. This approach is not only good for the environment. It is also good for people and the economy. It represents a unique opportunity to provide much needed homes, to make our city, town, and village centres more vibrant, to enhance air quality, and to restore the cultural and aesthetic value of these areas.

Recommendations

- Large amounts of empty and underutilised (commercial and residential) properties are evident in most Irish cities, towns and villages. However, comprehensive data on the scale of the issue is missing. **Allocate funding for a full review of the issue. E.g., by expanding the CTCHC programme to all towns and cities and launching a national housing condition survey**.

- **Buying an existing property is often riskier and more expensive, but given the additional benefits to society, funding should be allocated to support re-use**:
    - Introduce a "**Help to Buy and Renovate**" scheme (similar to the Help to Buy scheme) for existing properties in village, town and city centres.
    - Introduce a **capital allowance scheme** for small landlords and developers to convert empty/underused space above the shop to apartments.
    - Introduce a **tax relief for money spent on refurbishing or converting commercial and residential properties** in all Irish towns and cities centre.
    - **Better connect retrofit grants and tax incentives to schemes supporting reuse**. E.g., simplify the application process, ensure these grants/financial mechanisms complement each other to better support town and city centre first, compact growth and carbon emissions reduction objectives.
    - Allocate funding to **pilot a one-stop-shop for reuse** to make it easier for building owners/prospective buyers to bring back these properties into use.

- Replace the property tax by a **site value tax** charged on the value of the land to disincentivise under use of properties and sites.

ENCOURAGING LARGE SCALE ENERGY RENOVATION

Rational: Last year's increase in funding for energy renovation provided much needed certainty to the industry, but further actions are needed if we are to be anywhere near achieving our 2030 targets. The

[2] Source: CTCHC Programme, June 2022

IGBC urge the Government to prioritise energy renovation in the 2023 budget. Boosting energy renovation is critical in reaching our climate targets, but it can also deliver significant social and economic benefits across Ireland. More specifically, it is key in addressing energy prices rise, fuel poverty, and in improving health - which in turn would reduce health costs[3].

Recommendations:

- Too often building owners simply don't know what to do or where to start when it comes to energy renovation. **Independent high-quality advice** is key to support them in that journey, and more specifically to support phased renovation[4] and retrofit of traditionally built buildings[5].
    - The current 23% VAT rate on professional services discourages building owners from getting professional advice. **Reduce VAT to 9% on professional services for retrofits**.
    - Allocate funding for the development of a **register of independent energy renovation advisors** to make it easier for building owners to identify building professionals who have upskilled in energy renovation, hence supporting quality renovation. This would complement SEAI's List of Registered Technical Advisors and could be developed based on the recommendations of the SEAI funded BUNRS project.
    - Allocate funding to the **development of a warranty scheme for all SEAI's retrofit schemes** to better protect building owners and increase trust in the process.

- **Reform the Free Energy Upgrades scheme to ensure low-income households** (e.g., based on P60) **living in low BER homes are eligible** - regardless of home ownership status and/or welfare payment eligibility. E.g., open SEAI free energy upgrade scheme to low-income tenants with a long-term lease.

- Introduce a **9% VAT rate on construction products which contribute to carbon savings in the operational phase of a building life cycle**. This would provide an additional incentive to retrofit, while addressing inflation and is fully aligned with recent developments at EU level[6]. Flag that this reduced VAT rate will be reviewed within two years to better support products with a low embodied carbon. Embodied carbon emissions in the construction sector account for 14% of Ireland's emissions and must be addressed. It is anticipated that within two years data on the embodied carbon of construction products will be available at scale, allowing for such a measure – See section 4.

- Use the **Accelerated Capital Allowance (ACA) scheme to encourage the use of the best performing heat pumps in the market** (e.g., working with natural refrigerants with global warming potential below 5) to deliver higher climate benefits, and **extend the scheme to renovation products that have at least 50% lower than average Global Warming**

[3] The Healthy Homes Barometer shows that 130K children were living with dampness in Ireland and 50K with cold temperatures in 2019. Prolonged exposure to indoor dampness and mould can be detrimental to health and have knock-on effects such as missed school days (estimated to be c. 22.5K missed days per year in Ireland) and economic costs.

[4] The majority of energy renovation taking place in Ireland are phased renovation. These renovation works must be planned and implemented in a holistic and technically sounds manner to prevent "lock-ins" and contribute to a reduction of Ireland's carbon emissions.

[5] Approximately 16% of the residential building stock was constructed prior to 1940.

[6] E.g., Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. REPowerEU plan (SWD(2022) 230 final) – "Member States should also make full use of supporting measures such as reduced VAT rates for high efficiency heating systems and for insulation in buildings and other energy pricing measures, which encourage switching to heat pumps and purchase of more efficient appliances."
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - EU 'Save Energy' (COM(2022) 240 final) – "Member States should also make full use of the opportunities available to them to promote energy efficiency such as reduced VAT rates for high efficiency heating systems, ensuring energy pricing encourages switching to heat pumps and encouraging purchase of more efficient appliances".

Potential in their product category as demonstrated in their Environmental Product Declaration (EPD)[7].

ENSURING NEW HOMES ARE TRULY SUSTAINABLE AND SUPPORT A LOW CARBON LIFESTYLE

Rational: 400,000 homes must be built in Ireland by 2030. To halve our emissions by then, these homes must be low carbon across their whole life cycle. This does not only relate to the energy we use to heat, cool, and power them. Where we build them impacts our transport emissions. How we build them impacts our industrial emissions from the production of construction materials. **All homes built today must hence be highly energy efficient, constructed with low carbon embodied materials and enable a low carbon lifestyle.**

Recommendations:

- **Where government invests in housing through grant aid or procurement ensure that these developments adhere to higher sustainability requirements** - e.g., through green building certifications such as the Home Performance Index[8] or equivalent, as it's done in Germany for all KfW funded projects. This could first be piloted on a programme where subsidies are significant, such as Croí Cónaithe (Cities) Scheme.

- Introduce a **site value tax** charged on the value of the land to disincentivise under use of sites and properties.

- Introduce a **9% VAT rate on construction products which contribute to carbon savings in the operational phase of a building life cycle**. Highlight that within two years, this reduced VAT rate will be reviewed to take into account embodied carbon emissions. This will contribute to raising awareness about the issue, while giving time to develop quality data for all construction products – See 2.

SUPPORTING THE DEVELOPMENT OF A LOW CARBON CONSTRUCTION MATERIALS INDUSTRY

Rational: Supporting the development of a low carbon construction material industry is key to reach Ireland's climate targets. As a growing number of countries have or are in the process of regulating embodied carbon emissions[9], developing this industry and building expertise in this area will ensure Irish companies remain competitive. The development of a strong biobased construction materials industry[10] could also support sustainable, local jobs across the country.

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[7] Environmental Product Declarations (EPD) are a standardised way of providing data about the environmental impacts of a product through the product life cycle. In Europe, they must conform to the European Standard, EN 15804, which ensures that EPD for construction products use a common methodology, report a common set of environmental indicators and have a common reporting format. This means that EPD can be integrated into building level assessment and used to compare construction products in a building context.

[8] The Home Performance Index is Ireland's national certification system for quality and sustainable residential development. The label was developed by the IGBC with support from the EPA and after extensive consultation with the industry. The HPI certification is based on verifiable indicators that are divided into five categories: Environment, Economic, Health and Wellbeing, Quality Assurance and Sustainable Location. 10082 homes have registered for certification to date and Home Building Finance Ireland (HBFI) already offer a discount of up to 0.5% on loans to homebuilders for developments certified with the HPI.

[9] Embodied carbon emissions are already regulated in the Nordic countries, France, and the Netherlands. The EU has also developed a methodology to measure embodied carbon emissions in a standardised way as part of the EU's Framework for Sustainable Buildings, Level(s).

[10] Biobased materials typically require lower CO_2e emissions to produce, and they sequester carbon. Ireland's climate is ideally suited for and has great potential to provide biobased construction materials from timber or rapidly renewable fibres such as hemp.

Recommendations:

- **Provide financial incentives or directly fund production facilities for biobased construction materials** (e.g., CLT, sheep's wool, hemp, and straw), as it was done in Scotland to support the development of natural fibre construction insulation. E.g., through an accelerator scheme.

- **Increase support for innovative methods of construction and materials.** E.g., increase funding for Enterprise Ireland's Built to Innovate programme to further support Modern Methods of Construction.

- Highlight that within two years, the reduced VAT rate on construction products which contribute to carbon savings in the operational phase of a building life cycle (see part 2) will be reviewed to take into account embodied carbon emissions.

- SEAI's EXEED programme has been highly successful in promoting innovation in reducing operation emissions. **A similar design and capital grants scheme should now be introduced for project developers engaged in innovative, measurable low carbon construction technologies**.

- **Allocate funding to support the development of infrastructures (data and tools) to accurately measure embodied carbon**. E.g., developing a national WLC assessment methodology aligned with the European Framework for sustainable buildings (Level(s)).