# IRISH GREEN BUILDING COUNCIL

# **10 MEASURES** FOR A BETTER, MORE SUSTAINABLE BUILT ENVIRONMENT



With 2023 being the warmest year on record and an ever-increasing housing crisis, there is little doubt that housing and the environment are the two biggest challenges facing our country.

While the **construction and built environment** sector is carbon and resource intensive and has a huge impact on nature, this also means **it holds the key to reducing our carbon emissions.**  In addition, the transition to well-planned villages, towns, and cities cuts across many social and economic issues currently faced by Ireland, from the housing crisis to energy and transport costs, air quality and sedentary lifestyles.

# How does construction & the built environment impact our environment?

Construction and the built environment account for 37% of our national emissions<sup>1</sup>, with projections indicating that current actions won't be sufficient to deliver on our climate targets. Furthermore, over 50% of all the waste generated in Ireland comes from construction and demolition. Density recommendations included in the National Planning Framework and current trends in new developments will also require large areas of land leading to habitat destruction and fragmentation, with negative impacts on biodiversity<sup>2</sup>.

#### Create ambitious regeneration policies to better support vibrant city, town, and village centres

Make bringing back vacant, derelict, and sub-used properties into more intensive use a national priority. Bringing back these properties into use through highquality renovations is the best, most cost-effective way to address both operational and embodied carbon emissions<sup>3</sup> in the built environment, as well as transport emissions<sup>4</sup>. It also represents a unique opportunity 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.

# HOW?

Ensure policies, regulations, taxation, and financial incentives are fully aligned with overall carbon reduction goals, including regeneration objectives. E.g., review building regulations (including TGD B, K and M) to better support reuse of existing properties, consider expanding SEAI's mandate so that regeneration and renovation grants are overseen by one single organisation.

Buying an existing property is often riskier and more expensive, but given the additional benefits to society, funding should be allocated to further support re-use. E.g., Extend the "First Home Scheme" to include existing properties located in village, town and city centres.

Complete a full review of the existing stock to evaluate what is available for use and where, and to assess what additional space and building types may be needed.

Set up a Citizens' Assembly on housing and climate action, to build consensus around potentially contentious policies on how to meet housing need of an expanding population without increasing carbon emissions.

#### Mandate global warming potential measurement of all new buildings and infrastructure

Despite real progress, <u>scientific projections</u> show that current policies and legislation will not be sufficient to deliver a science-based cut of 51% of our carbon emissions by 2030. Small steps that have been taken to address the whole life carbon impact of construction and the built environment must be urgently accelerated.

# HOW?

Introduce the first carbon targets for different building types as soon as possible, and at the latest by 1st January 2027. Similar legislations are already in place in other European countries – E.g., Denmark and France.

Require a full assessment of the carbon impact of all projects included in the NDP and start prioritising them (where necessary) to ensure the infrastructure we need is delivered without compromising our climate goals.



### Ensure all new homes built in Ireland are truly sustainable

When **new homes are built, they must not only be highly energy efficient, but they must also be well located and built in a sustainable manner** to address both operational and embodied carbon emissions and to reduce transport related emissions. This would ensure new homes are cheaper to run, improve people's quality of life, and contribute to better use of scarce financial and human resources.

HOW?

Review planning and building regulations, so that they better support the decarbonisation of the built environment and fully reflect Ireland's climate objectives. Besides planning, specific areas to consider include TGD B to reflect international research and developments in mass timber construction, and TGD G to integrate water efficiency requirements for sanitary ware.



#### Ensure Government leads by example

In a climate and biodiversity emergency, no government's policies, legislation or programmes should negatively impact Ireland's climate goals. The use of Green Public Procurement (GPP) criteria must become the norm. This would not only support the public sector transition towards a sustainable built environment, but it would also contribute to scaling the markets for low-carbon and circular materials.

# HOW?

Ensure all government expenditure and fiscal policies are fully aligned with Ireland's 2030 and 2050 Climate and Biodiversity targets.

Where government invests in buildings, including housing through grant aid or procurement from private sector, ensure that these developments adhere to higher sustainability requirements, including a wider range of objectives such as addressing whole life carbon emissions and reducing transport requirements, climate adaptation and biodiversity. This could be achieved through green building certifications such as the Home Performance Index or at minimum EU taxonomy compliance.

Mandate the use of GPP for all public notices published for procuring buildings and renovations.

 This figure does not even include private transport emissions largely driven by poor planning.
If 400,000 new homes are built in Ireland by 2031 and based on the density recommendations included in the National Planning Framework and current trends, 349km<sup>2</sup> will be needed to build these homes, or a third of County Dublin (an estimate which does not even include the land required to build associated infrastructure).
The embodied carbon emissions of a deep residential retrofit is approximately a quarter of the emissions of a new build

# Make high-quality deep energy renovation more affordable

Continue to invest in energy renovation to reduce carbon emissions, improve people's health and wellbeing, and contribute to substantial cost reductions and tackling energy poverty.

# HOW?

Review financial support for energy efficiency on a regular basis to ensure it provides additionality and supports equal access for vulnerable communities. This would contribute to better channelling of funding towards low-income households who cannot afford energy renovation work.

Encourage a more targeted area-based approach to deliver more with less resources, build capacity in industry and better support climate equity.

Extend the zero rate VAT introduced for the supply and installation of solar panels on private dwellings to incorporate all energy efficient products which contribute to the decarbonisation of the building stock.

### Make high-quality energy renovation more accessible

To halve our sector emissions by 2030, the delivery of Ireland's national retrofit programme must be significantly accelerated. This will require further support for building owners in their renovation journey.

HOW?

Allocate funding for a well-resourced network of independent energy renovation advisors in each local authority. This service would support households throughout the renovation journey providing both financial and technical advice.

Develop a quality assurance scheme for one-stop-shops to ensure independent advice and customer protection are provided, hence supporting high quality retrofit works.

Mandate and fully fund the development of Renovation Passports<sup>6</sup> for shallow energy renovation works receiving public funding. E.g., repair and maintenance scheme in social housing and the SEAI's Individual Energy Upgrade Grant Scheme.



#### Invest in skills to support Ireland's transition to a truly sustainable built environment

Over 120,000 additional workers are required across all construction professions and trades to reach our 2030 Housing for All and Climate Action Plan targets<sup>7</sup> in a business as usual scenario. Whilst progress has been made with the roll out of NZEB courses across the country and the availability of more blended courses, **career opportunities in energy renovation need to be better promoted and upskilling further incentivised.** 

# HOW?

Run targeted communication campaigns to inspire, recruit and upskill in energy renovation school leavers, those working in declining sectors and construction workers.

Incentivise and support construction companies to take on new apprentices.

Introduce a "Sustainability Pass", using the safe pass model to incentivise upskilling in the industry.

Provide high quality guidance on best practice to all players in the construction value chain. This includes guidance on the reusability potential of buildings such as converting commercial buildings to residential use and future reuse of new built and building elements.

#### Support the development of innovative, low carbon technologies and materials

Ireland with a large agricultural sector has a strategic interest to identify and develop local low carbon biobased solutions from agriculture and forestry and to encourage solutions from the circular economy. By championing measures that embrace the circular economy and biobased materials, policymakers can facilitate a lower carbon and cost-efficient model for the industry.

# HOW?

Pilot, and invest in the creation of new value chains and infrastructure for reused and biobased materials. E.g., Provide financial incentives or directly fund research and production facilities for biobased construction materials, such as CLT, sheep's wool and hemp.

Review the definition of "proper materials" (TGD D), to make it easier and faster for new innovative, low embodied carbon materials, to be placed on the Irish market without lowering standards.

Require the development of effective dismantling, collection and sorting infrastructures for construction waste.

5 See Healthy Homes Ireland (2023), <u>Towards Healthier, Greener Homes</u>. 9 Renovation passports are "tailored roadmap for the deep renovation of a specific building in a maximum number of steps that will significantly improve its energy performance". While preference should be given 10 deep renovations that have a greater impact potential, this action will ensure that all "shallow retrofit" taking place with state support will eventually lead to highly energy efficient, comfortable homes. 7 BUSI2030 (2023), <u>Build Up Skills – Ireland 2030. Analysis of the National Status Quo</u>

#### Protect and enhance biodiversity in the built environment

Urban land expansion in Ireland is among the highest in Europe and characterised by the formation of scattered, remote urban structures. Addressing habitat destruction and fragmentation associated with our built environment must be a priority. Enhancing biodiversity would also benefit human health and wellbeing through stimulating physical activity, improving mental health and reducing exposure to harmful pollutants.

# HOW?

Drive the prioritisation of redevelopment of brownfield sites over new development of greenfield sites.

Require biodiversity to be considered as a key component in all new projects, and the employment of an ecologist for all projects over a certain size - as well as infrastructures proposed under the National Development Plan, to help reach a biodiversity net gain of at least 10% by 2026.

Develop highly practical guidance documents and toolkits for different types of developments, providing information on specific actions that can be implemented on smaller projects, such as using permeable surfaces and choosing the right vegetation.

### Enhance the ability of our built environment to respond to external shocks

With children who are born in 2020 due to experience a two-to-sevenfold increase in extreme weather events and the associated risks, compared with people born in 1960<sup>7</sup>, more must be done to **make our villages, towns, and cities climate resilient.** 

HOW?

Encourage use of sustainable urban drainage systems (SuDS) to ensure that the rate of water run-off is no greater than before development. E.g., consider mandating maximum soil sealing targets or using tax incentives to discourage soil sealing.

Review the National Planning Framework on climate adaptation and ensure it better supports necessary actions needed to make our coastal towns and cities more resilient.

Review building regulations to ensure they better address over-heating risk. E.g., review international best practices such as the <u>English TGD 0</u>, or the F<u>rench RE2020</u>.



#### About the Irish Green Building Council

The IGBC is Ireland's leading authority on green building best practices with over 400 member organisations spanning the entire built environment industry. The IGBC is affiliated with the World Green Building Council, a network of over 80 national Green Building Councils worldwide with a total membership of over 27,000 of the most progressive international organisations and businesses. Collectively, we work to leverage the sustainable built environment solutions that already exist and provide confidence to design and implement robust policies and regulations to deliver a better, greener built environment.

More information at www.igbc.ie

