

# Building A Zero Carbon Ireland: Industry Insights & Actions

## Key Findings & Recommendations

*Construction and the built environment are responsible for 37% of Ireland's greenhouse gas emissions. Ireland cannot reach its climate targets without decarbonising the built environment across its full life cycle, from material extraction to each building's end-of-life stage.*

*In 2022, the Irish Green Building Council published "Building a Zero Carbon Ireland", our roadmap to decarbonise Ireland's built environment. Three years on, how is the industry performing against the roadmap's targets, what barriers stand in the way, and what actions should be taken next?*



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## Key Findings

### Overall

- **The industry is willing to act**

A large majority of organisations are eager to decarbonise and play their part in tackling the climate crisis, and many already are. Some, especially larger organisations, have detailed plans for reducing emissions and know that decarbonisation makes good business sense too.

- **Regulatory, cultural and financial barriers remain**

Some of the common barriers to decarbonisation cited include:

1. Regulations that restrict the use of low carbon construction materials;
2. The investment required to decarbonise including the cost of low carbon materials; and
3. Lack of effective collaboration around carbon reduction on construction projects.

- **SMEs need more direct support**

Smaller organisations struggle to invest the time and money required to measure their carbon emissions, develop decarbonisation plans and take action. These organisations need direct support in terms of finance, resources and clear guidance. This is critical as SMEs comprise a large portion of Ireland's construction sector.

### Culture & Collaboration

- Lack of early, effective collaboration around carbon reduction on construction projects is a barrier to decarbonisation.
- A rapid culture change is needed within the industry to mainstream low carbon, biobased materials.
- Creating a culture of sustainability within organisations requires time and effort and must be resourced properly at all levels.

### Life Cycle Carbon Emissions

- Under the EU's Energy Performance of Buildings Directive (EPBD), Ireland must measure and limit life cycle carbon emissions by 2030 at the latest. Many organisations want an earlier timetable for these limits to be introduced. Uncertainty leads to inaction and creates the impression that reducing life cycle emissions is not a priority.
- The link between circularity and life cycle carbon emissions is not clearly understood. More education is needed to disseminate the importance of this link and highlight the opportunities for addressing life cycle emissions through the circular economy.

### Policy

- Many organisations support the introduction of clear limits on life cycle carbon emissions for buildings before the EPBD deadline of 2030.
- Green public procurement could be a powerful tool for stimulating decarbonisation and innovation, but its application remains weak and inconsistent. Many organisations would like procurement processes to reward them more for their sustainability efforts.
- Key regulations (e.g., TGDs B & D) must be reviewed to facilitate rapid uptake of low carbon materials.

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## Recommendations for Policymakers

### Regulation

- Introduce a clear, ambitious timetable for the regulation of life cycle carbon emissions.
- Update key regulations (e.g., TGDs D & B) to facilitate rapid uptake of low carbon materials.

### Policy

- Put sustainability at the heart of public procurement and thoroughly implement existing green public procurement policies.
- Support the industry to embrace circularity—e.g. through physical and digital infrastructure (e.g., digital product passports and material exchange platforms).
- Strengthen the electricity grid to enable lower carbon manufacturing of construction products and decarbonised building sites. Prioritise electricity uses that support decarbonisation.



## Recommendations for Industry Bodies

### Research & Education

- Produce short, simple, targeted guidance on critical pieces of regulation, key sustainability concepts and examples of good practice.
- Disseminate the concept of life cycle costing and its relationship to low carbon construction more widely.
- Research the carbon performance of different forms of Modern Methods of Construction (MMC) and disseminate the results to industry.
- Develop a clear, agreed definition of net zero carbon for the industry to work towards.
- Develop guidance and tools to make Post Occupancy Evaluation (POE) the norm on projects.

### Tools & Processes

- Scale a collaborative, design for performance approach to sustainability into all construction projects, building upon the work completed as part of projects such as Design for Performance (RIAI & IGBC).
- Prioritise education around Environmental Product Declarations (EPDs), to help the industry understand these documents and how to use them in specification.