

DRAFT LOUTH COUNTY DEVELOPMENT PLAN 2021 -2027

Submission by Cement Manufacturers Ireland

Cement Manufacturers Ireland (CMI) is the representative industry association for the cement industry in Ireland. It is a constituent body of the Irish Business and Employers Confederation (Ibec) and has three members in the Republic of Ireland: Breedon (formerly Lagan) Cement, Irish Cement and Mannok (formerly Quinn) Cement and an associate member in Northern Ireland, Lafarge Ireland.

CMI is an active member of Cembureau, the European Cement Association and an affiliate member of GCCA, the Global Cement and Concrete Association.

The members of CMI support 2,000 direct and indirect jobs in Ireland in manufacturing and supplying a range of sustainable cement products for use in concrete and mortar in the construction industry in Ireland and abroad.

Our members have invested over €500 million since 2000 in new and upgraded energy efficient manufacturing facilities, utilising *Best Available Techniques* putting them among the most energy efficient in Europe. The benefits achieved by the industry in optimising the sustainability of its manufacturing processes pass directly into concrete and the construction sector and ultimately contribute to a low carbon sustainable built environment for all.

Cement Industry Low Carbon Initiatives

The cement industry in Ireland continues to progress significant initiatives to improve energy efficiency and reduce carbon emissions. The key initiatives are:

- Investment in modern energy efficient plant technology
- Fossil fuel replacement by alternative fuels – endorsed in the 2019 Climate Action Plan
- Development of Eco-efficient CEM II, which is a ‘low carbon cement’, first introduced to the market in 2006, and which now accounts for over 80% of the cement used in Ireland

Taken together these initiatives not only ensure the cement industry is transitioning to a low carbon future, but also ensure that the benefits accruing translate directly to the built environment through the use of locally produced, eco-efficient cement in concrete.

CMI fully supports the Cembureau ambition of climate neutrality for the cement and concrete sectors by 2050 as detailed in ‘Cementing the European Green Deal’ available via the following link https://cembureau.eu/media/kuxd32gi/cembureau-2050-roadmap_final-version_web.pdf

Submission

Cement Manufacturers Ireland support the Councils overall strategy to promote Louth as a 'prosperous and thriving County' while 'transitioning to a low carbon society', as set out in the **Strategic Vision** of the Plan:

'The Strategic Vision for County Louth enshrined in the Draft County Development Plan seeks to deliver a prosperous and thriving County, and in particular, the RGCs of Drogheda and Dundalk where no individual or social group is excluded, which enshrines the three principles of environmental, social and economic sustainability including protection of the County's resources, heritage and the natural and built environment while transitioning to a low carbon society.'

While we are in general supportive of the Plan we have a number of comments set out below for the Council to consider.

Our member companies manufacture cement which is used as a binder in concrete. Concrete, manufactured using local materials, is a popular construction material because it provides unrivalled versatility, resilience, fire safety, and durability as well as high thermal mass, which means it is an important part of modern highly energy-efficient buildings. Properly designed and constructed concrete structures can last 100 years or more, which makes them very resource efficient. Because of this extended lifespan concrete has low embodied CO₂ compared to most other construction materials such as timber (especially glue laminated timber), steel or bricks.

Strategic Objective SO 4 of the Plan sets out the following;

Transition to a low carbon and climate resilient County supporting energy efficiency and reducing energy demand, through a combination of mitigation and adaptation responses to climate change. This includes for increased usage of renewable energy through developing indigenous energy resources, supporting the transition to a low carbon economy by 2050, and ensuring flood risk management.

Concrete is crucial to building a low carbon future. Be it the foundations and towers of wind turbines, energy efficient buildings, new transport infrastructure, flood protection or other projects aimed at adapting to climate change, concrete delivers performance, resilience, and durability. And at the end of life concrete is 100% recyclable.

Chapter 10 - Infrastructure and Public Utilities includes Policy Objective IU 79

To support and promote structural materials in the construction industry that have low to zero embodied energy and CO₂ emissions

The carbon footprint per tonne of concrete has already been reduced. Further reductions can be achieved with the efficient use of low-clinker cement, optimising the concrete mix, aggregate packing, and selecting the right additives, whilst helping to deliver concrete with the same performance and strength.

We would note, for example, that in the context of concrete construction, many studies have demonstrated that appropriately designed heavyweight construction outperforms lightweight construction in terms of energy use and hence carbon emissions, when the energy used during manufacturing and ‘in use’ phase of the building are considered. In addition, concrete is increasingly being recognised as a carbon sink in its own right, due to ‘re-carbonation’ during its lifetime, thus significantly reducing its overall carbon impact.

While a goal of minimising ‘upfront’ carbon is important, it is also important to be aware that upfront carbon decisions can have impacts on whole life carbon. ‘Low embodied’ construction materials that perform poorly in operation create adverse financial, environmental and social implications. To achieve the vision of compact, sustainable communities in high quality housing located in attractive places; designing with whole life carbon in mind is essential.

CMI believes that **Policy Objective IU 79**, while well intentioned, lacks context and therefore is open to misinterpretation.

It is our contention that any reference to ‘*embodied energy and CO2 emissions*’ should, in line with European Directives, Guidelines and Standards be made in the overall context of ‘life cycle assessment’. Rather than focusing on ambiguous ‘embodied energy’ comparisons between building materials, what actually matters is the energy performance over the full lifetime of a building.

European Union Directives on the Built Environment now insist that a ‘life cycle’ approach be taken to evaluating the sustainability credentials of buildings and infrastructure. European Standards developed by CEN TC 350 ‘Sustainability of Construction Works’, particularly EN 15643 ‘Assessment of buildings’ and EN 15978 ‘Assessment of Environmental Performance of Buildings’ support designers in implementing this approach.

Furthermore, all the internationally recognised Building Assessment Schemes - LEED, BREEAM etc. recognise and implement a ‘whole of life approach’ to the assessment of construction projects.

In the light of the above we would respectfully suggest that **Policy Objective IU 79** of the Plan includes the phrase ***as assessed across the whole life of the building*** [included in bold below] to reflect the need to take into account the ‘in use’ impacts as well as embodied impacts when choosing building materials. In this way the potential for misinterpretation will be removed from the Plan.

*“To support and promote structural materials in the construction industry that have low to zero embodied energy and CO2 emissions **as assessed across the whole life of the building**”.*

Cement Manufacturers Ireland welcomes this opportunity to provide feedback on the Draft Development Plan and looks forward to supporting the publication of the final Plan.