EU policy on whole life carbon

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Whole Life Carbon

- Initiatives as basis for legislation and transformation
  - Level(s) Framework for Sustainable Buildings – done

    Basis for assessment and reporting
  - 2050 Roadmap for Whole Life Carbon Reduction – under development

    Basis for benchmarking and target setting

- Legislation
  - Sustainable Finance Taxonomy – climate change done, circularity under development
  - Energy Efficiency Directive – EC proposal done
  - Energy Performance of Buildings Directive – EC proposal done

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Current legislation (proposals)

- Requiring assessment and reporting
  - Raise awareness
  - Build capacity
  - Compare design options
  - Soft approach to reduction of whole life carbon

Sustainable Finance – Climate Change Mitigation

New Buildings

3. For buildings larger than 5000 m^2 [285], the life-cycle Global Warming Potential (GWP)[286] of the building resulting from the construction has been calculated for each stage in the life cycle and is disclosed to investors and clients on demand.

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Energy Efficiency Directive (EC proposal)

Public Procurement

Given that buildings are responsible for greenhouse gas emissions before and after their operational lifetime, Member States should also consider the whole life-cycle of carbon emissions of buildings. That takes place in the context of efforts to increase attention to whole life cycle performance, circular economy aspects and environmental impacts, as part of the exemplary role of the public sector. Public procurement can thus serve as an opportunity to address the embodied carbon in buildings over their life-cycle. In this regard, contracting authorities are important actors that can take action as part of procurement procedures by purchasing new buildings that address global warming potential over the full life-cycle.

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Energy Performance of Buildings Directive (EC proposal)

New Buildings

The life-cycle Global Warming Potential (GWP) of new buildings will have to be calculated as of 2030 in accordance with the Level(s) framework, thus informing on the whole-life cycle emissions of new construction. Whole-life cycle emissions are particularly relevant for large buildings, which is why the obligation to calculate them already applies to large buildings (with a useful floor area larger than 2000 square meters) as of 2027.

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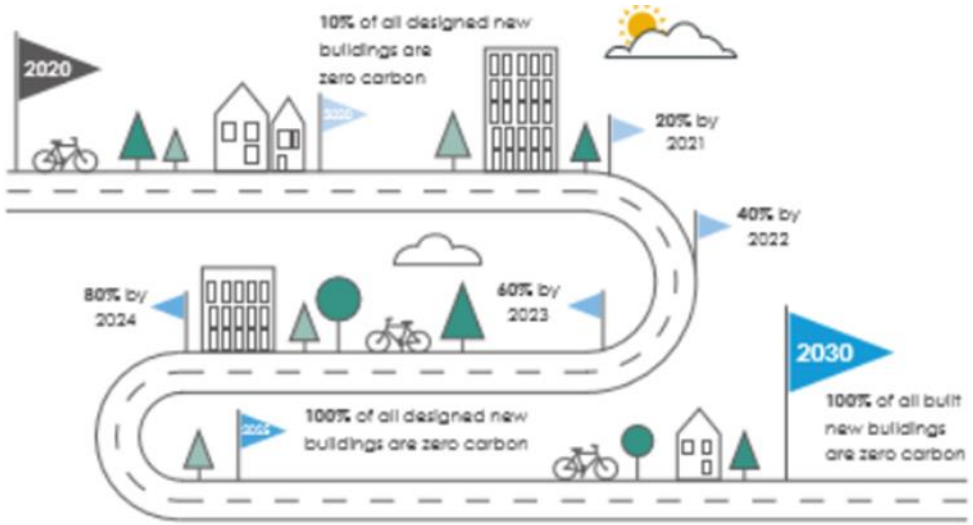
Roadmap features

- Milestones up to 2050
- Embodied and operational
- Not a list of policy recommendations
- Basis for quantified targets, in legislation and elsewhere

A basis for climate objectives

- Underpin policies and strategies, objectives and visions
- Encourage market initiatives



Reference: LETI CEDG

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Roadmap development

- Collaborative work led by the Commission
- Learn from others having developed roadmaps
- Engage across the EU
- Study providing baseline and scenarios
- Consulting lifecycle and building professionals

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Ongoing study
Dec 2021-March 2023

- Establish baseline
- Future embodied carbon (BaU)
- Trajectory for embodied carbon, towards climate objectives
- Identify reduction solutions
- Trajectory for operational carbon, towards climate objectives
- Stakeholder consultation

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Thank you

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