



BIM4ENERGY
E R A S M U S +

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BIM digital competencies to evaluate and improve the energy efficiency of European buildings.

A digital way towards positive energy districts

Energy efficiency of existing buildings in Spain

Speaker: Ceuti municipality

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Ayuntamiento de Ceuti



Universidad Politécnica de Cartagena





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EUROPEAN GREEN DEAL

- The EU has set a very ambitious goal: to become the first climate neutral continent in the world in 2050. Growth strategy, aiming to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy, where economic growth is decoupled from resource.
- It is also a strategy to implement the United Nation’s 2030 Agenda and the SDGs.
- Key aspects where efforts must be made. E.g.: building and renovating in an energy and resource efficient way.





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A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives



- 85% of the EU's building stock was built before 2001
- Most of those existing buildings are not energy-efficient
- Buildings are responsible for about 40% of the EU's total energy consumption, and for 36% of its greenhouse gas emissions from energy
- Energy poverty remains a major challenge for millions of Europeans



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A Renovation Wave for Europe

- Strengthening information, legal certainty and incentives.
- Ensuring adequate and well-targeted funding.
- Increasing the capacity to prepare and implement projects.
- Promoting comprehensive and integrated renovation interventions.
- Making the construction ecosystem fit to deliver sustainable renovation.
- Using renovation as a lever to address energy poverty and access to healthy housing.
- Promoting the decarbonisation of heating and cooling.



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A Renovation Wave for Europe

Building Information Modelling (BIM) improves transparency and reduces costs and resource use. The Commission will provide a **recommendation to promote Building Information Modelling in public procurement** for construction and provide a methodology to public clients to conduct cost-benefit analysis for the use of BIM in public tenders. Digital industrial platforms will allow stakeholders to collect and make better use of this data. The Commission will also develop a **unified EU Framework for digital permitting** in the built environment and establish a trusted scheme for **certifying energy efficiency meters** in buildings that can **measure actual energy performance improvements**.

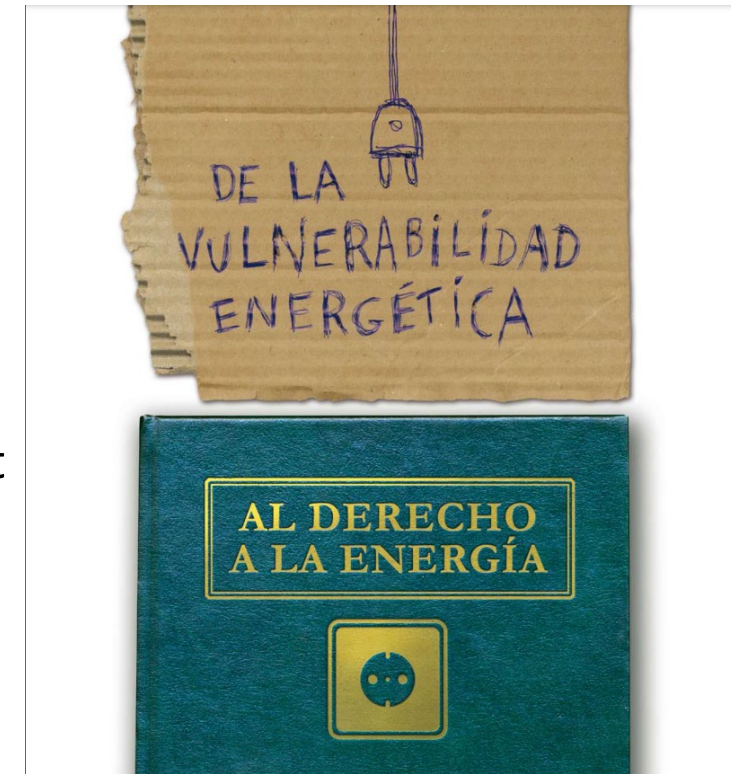


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Energy efficiency in SPAIN

- According to a report from Ecologistas en Acción, 84% of buildings in Spain are very inefficient, having most of them an E, F or G classification.
- According to a study from WWF, isolating building with criteria closed to passive houses, more efficient equipment and solar pannels may reduce energy consumption by 85% and CO2 emissions by 82%
- Energy inefficiency is one of the vulnerability factors of energy poverty.





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Recovery, Transformation and Resilience Plan

- 45% of buildings were constructed before 1980, 50% for residential use (9.7 millions houses), 1 million houses in a very bad state.
- Over 81% of existing buildings have letters E, F or G regarding emissions, and 84,5% regarding energy consumption.
- Less than 0,3% have letter A, and 0,2% regarding energy consumption.
- Component 2 of the Recovery, Transformation and Resilience Plan goes in line with the EU renovation wave. Objective: average savings of 30% of primary energy.





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Thank you 😊

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