

FIEC

European Construction Industry Federation

Industry Vision on Sustainability Assessment of Building

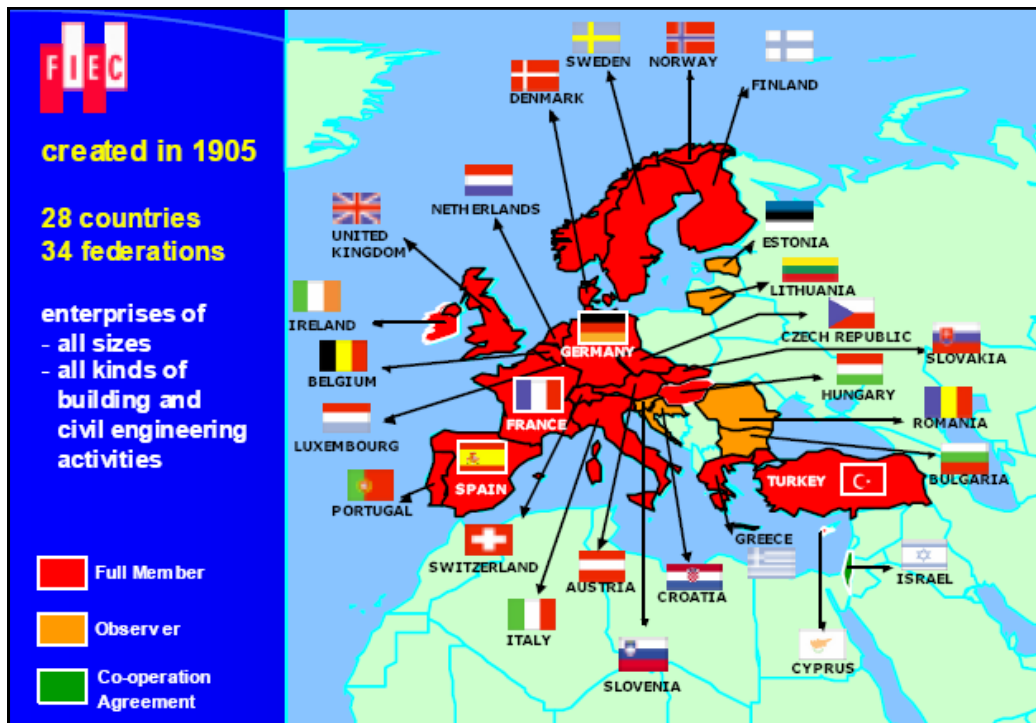
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Introduction

- FIEC
- Issues in the construction industry
- Sustainable construction
 - Life Cycle Costing
 - CEN TC 350
 - Lead Market Initiative
- LEnSE
- Conclusions





FIEC

- Estimated turnover (EU 27 - 2006) : 1.196 billion €
- 10,4 % of GDP
- 50,5 % of Gross fixed Capital Formation
- 2,7 million enterprises (EU 27), of which
 - 95% are SMEs with fewer than 20 and
 - 93% with fewer than 10 operatives
- 15,2 million operatives:
 - 7,2 % of Europe`s total employment
 - 30,4 % of industrial employment
- 26 million workers in the EU depend, directly or indirectly, on the construction sector
- **Biggest industrial employer in Europe**

Issues in the construction industry

- Dealt with in committees
- Dedicated committee on sustainability
- Sustainability issue among most important
 - EU Waste regulation
 - Energy / CO₂ emissions reduction
 - EPBD
 - REACH



Sustainable construction

The FIEC principles for sustainability

9. Promoting more environmental management strategies, notably through eco-design and the reduction of the environmental impact of construction activities and built facilities generally, whilst also promoting innovative environmental and energy efficient techniques, reducing water and energy use, ensuring where appropriate that materials used are taken from sustainable sources, re-using and recycling surplus or residual materials, progressively phasing out the use of hazardous substances, as well as preserving both biodiversity and Europe's cultural heritage.



Sustainable construction

- Life Cycle Costing
 - EC, Members States and Industry
 - Tri-partite WG on sustainable construction
- CEN TC 350
 - Involvement in BT/WG 74
 - No active participation in TC or WG's
- Lead Markets Initiative for Europe
 - Sustainable construction one of six markets
 - Market potential through lifting innovation barriers



Whole Life Costs	
Non-Construction Costs	1 Site or asset purchase and associated fees
	2 Development of client brief, procurement, cost, value and risk management, planning, regulatory and legal
	3 Design and engineering (client advisors)
	4 In-house resources and administration
	5 Finance, interest or cost of money
Construction Costs	1 Design and engineering (design and build)
	2 Temporary works, site clearance or groundwork
	3 Construction, fitting out, commissioning and handover
	4 Project management and planning supervisor (CDM Regulations)
	5
Operation Costs	1 Rates (and rent if applicable)
	2 Insurance
	3 Energy costs for heating, cooling, power and lighting, and utilities – water, sewerage
	4 Facilities management, cleaning, security
	5 Annual regulatory costs (e.g. fire, access inspections)
Maintenance Costs	1 Repairs, routine component replacement and minor refurbishment
	2 Loss of the facility during maintenance procedures
	3 Reduced building service life (if appropriate) resulting from any maintenance option
	4 Restoration (or replacement) of minor components (sub-elements and sub-systems) to their original aesthetic and functional performance
	5
Replacement Costs	1 Restoration (or replacement) of the main elements or systems to their original aesthetic and functional performance at various stages of the life of the facility
	2 Loss of the facility during replacement
	3 Unanticipated costs resulting from legislation introduced subsequent to completion of the constructed asset, e.g. in relation to environmental, health and safety requirements or fiscal matters
	4
	5
Disposal Costs	1 Demolition
	2 Waste disposal
	3 Site clearance



Sustainable construction

- What does the client ask and pay for?
- How does sustainability fit in the process?
- Is sustainability best facilitated by (EU) regulation or by market mechanism?
- How to balance social, economic and environmental aspects?



LEnSE

- Based on existing methodologies, initiatives and ongoing standardisation activities
- Strategic consultation
- Pilot test cases
 - Two or three days work
- Choices of issues and sub-issues transparent
- Weighting is made explicit



LEnSE

- Will governments, architects, project developers and end-users use LEnSE?
- Why would they use LEnSE?
- Contractors may use it if:
 - Client asks and pays for it
 - Legislator requires it
 - Permitting authority requires it
 - There are economic or marketing stimuli
- Others?



LEnSE

- Weighting seems to be of interest to many
 - Consider that local authorities may want to set their own weighting factors
 - Consider suppliers and technologies that may be penalised
 - Consider the political character of weighting
- Issues present in LEnSE
 - Interest groups may want to insert new issues
 - Interest groups may want to delete new issues



Conclusions

- Many questions to be asked and answered
 - Consultation with outside-in approach
- The 'market' for a label needs scrutiny
- Weighting seems political

- Sustainability by (EU) legislation or by market mechanism
 - Develop vision



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