

METALS FOR BUILDINGS
Essential &
fully Recyclable



METALS FOR BUILDINGS

European metals alliance for recyclable & sustainable buildings

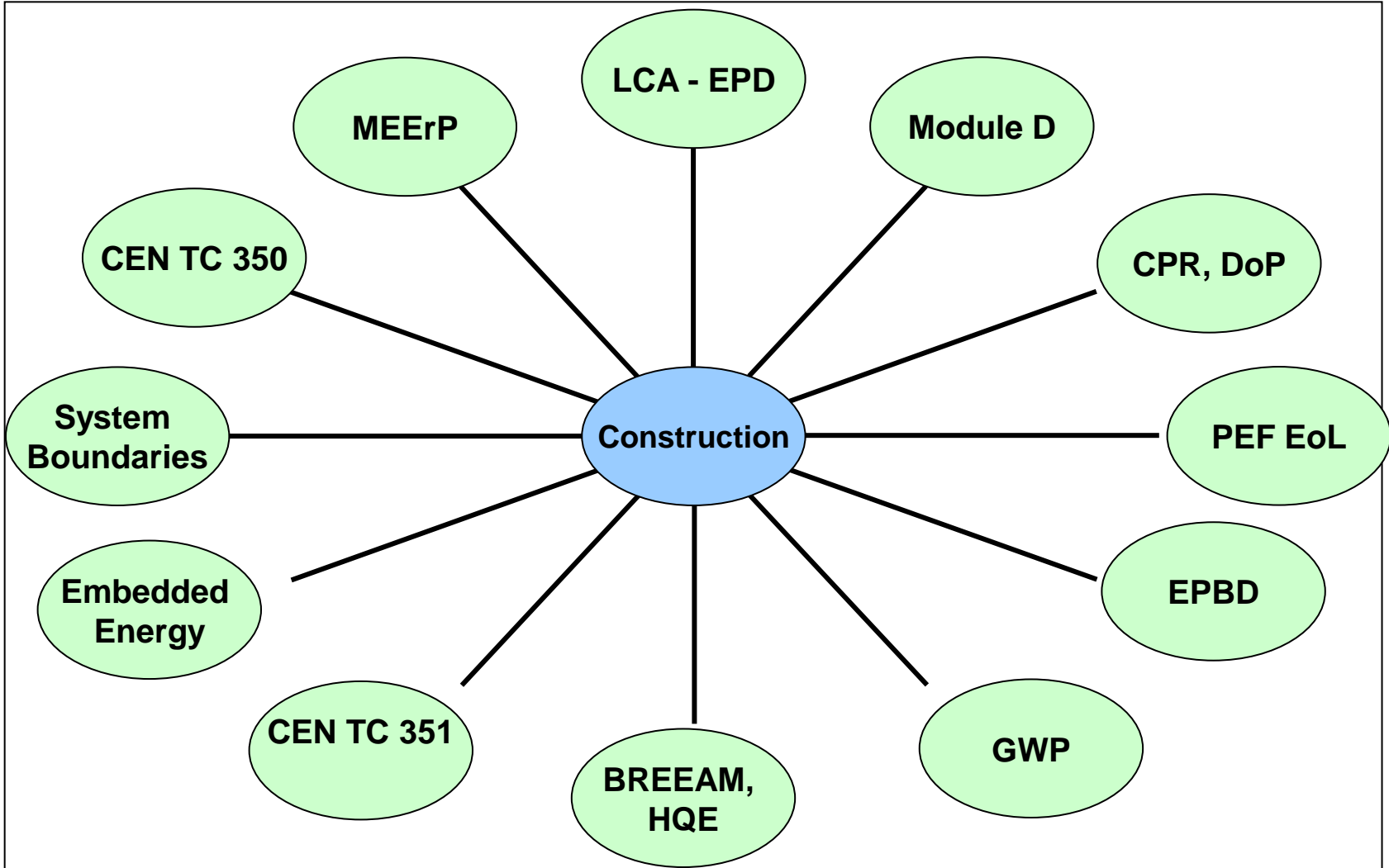
Sustainable Buildings: Challenges for the metal industry

Patrick Le Pense

MFB Alliance Chairman

October 25th 2012

What's new in construction ?



Bring answers to global mega-trends



**Growing
Population**



Urbanization



**Climat
change**



**Healthcare
Revolution**



**Accelerating
technology**

Our solutions are already answering partially

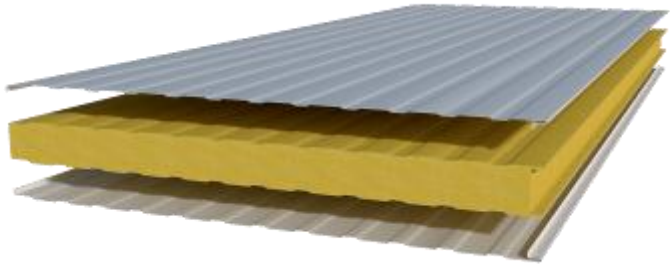
- Contribution to energy efficiency in buildings
New and renovation



- Metal solutions are enabling designers to invent the « modern art of architecture »



- Very long lasting durability



What will be the building of tomorrow ?

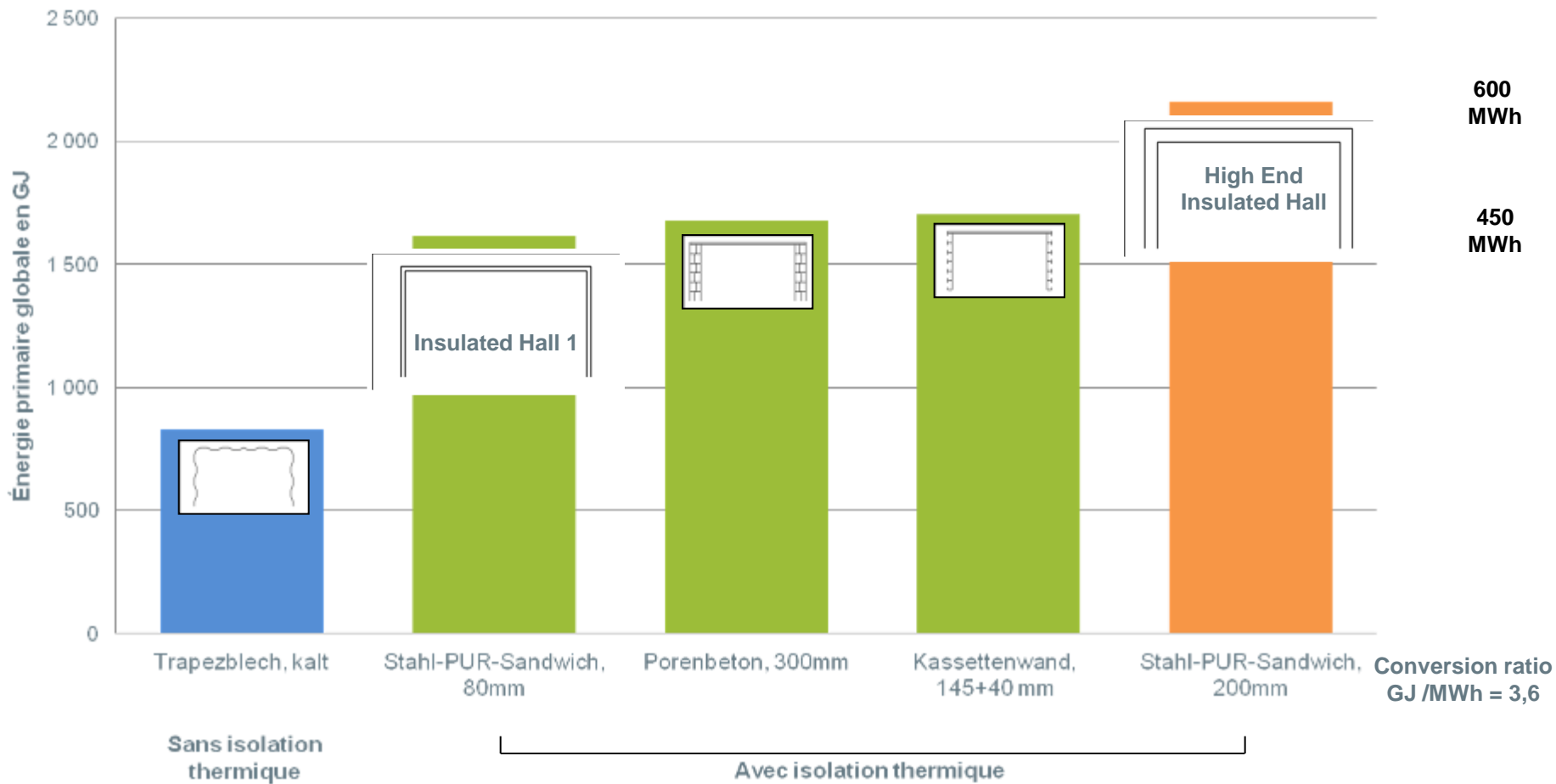


A future “high performing” building envelope

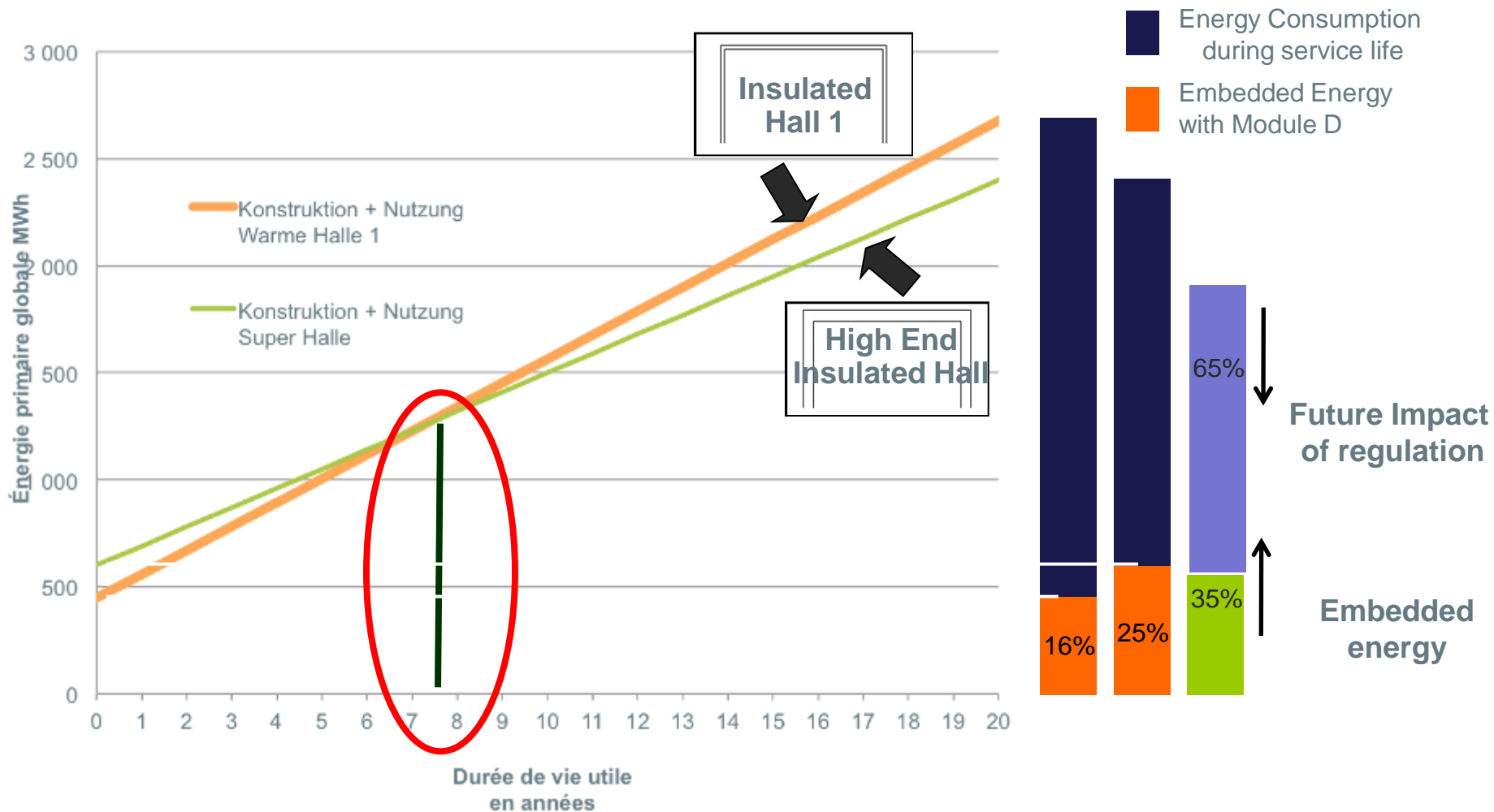
- High insulation levels guaranteed
 - Insulation & air tightness performances
 - No more thermal bridges....
 - More prefabrication / preassembly of components offsite
- Combination of active & passive system needed
 - To manage summer and winter comfort together
 - The building interior has to be safe & comfortable
- Participation to the full building performance
 - Reduced impacts all along the building life cycle
 - Embedded energy at fabrication and erection stage
 - Need to consider EoL scenario
- Insulation:
 - Only « one visible part » of building performance



Industrial Buildings LCA: Primary energy impacts

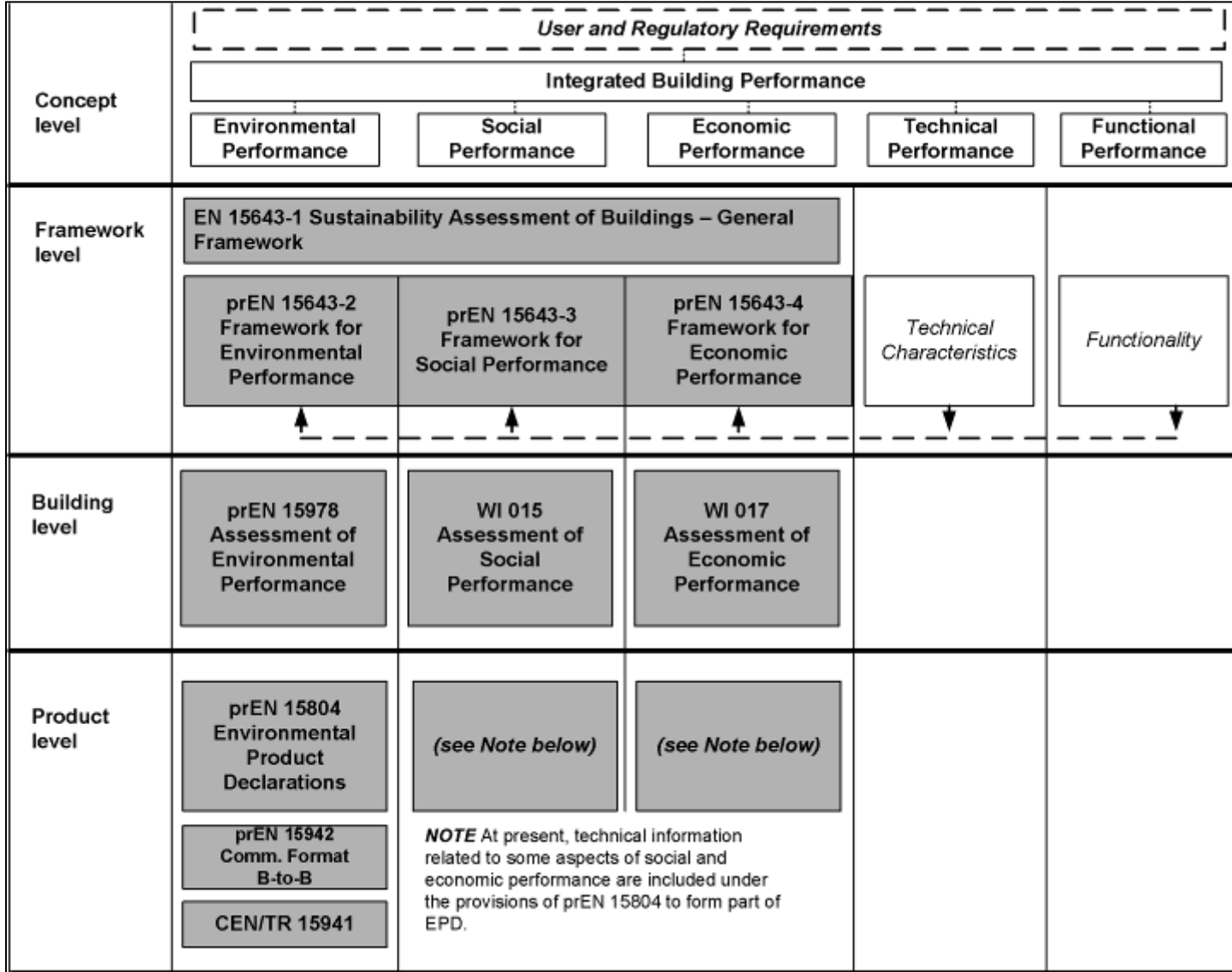


Industrial Buildings LCA: Primary energy impacts





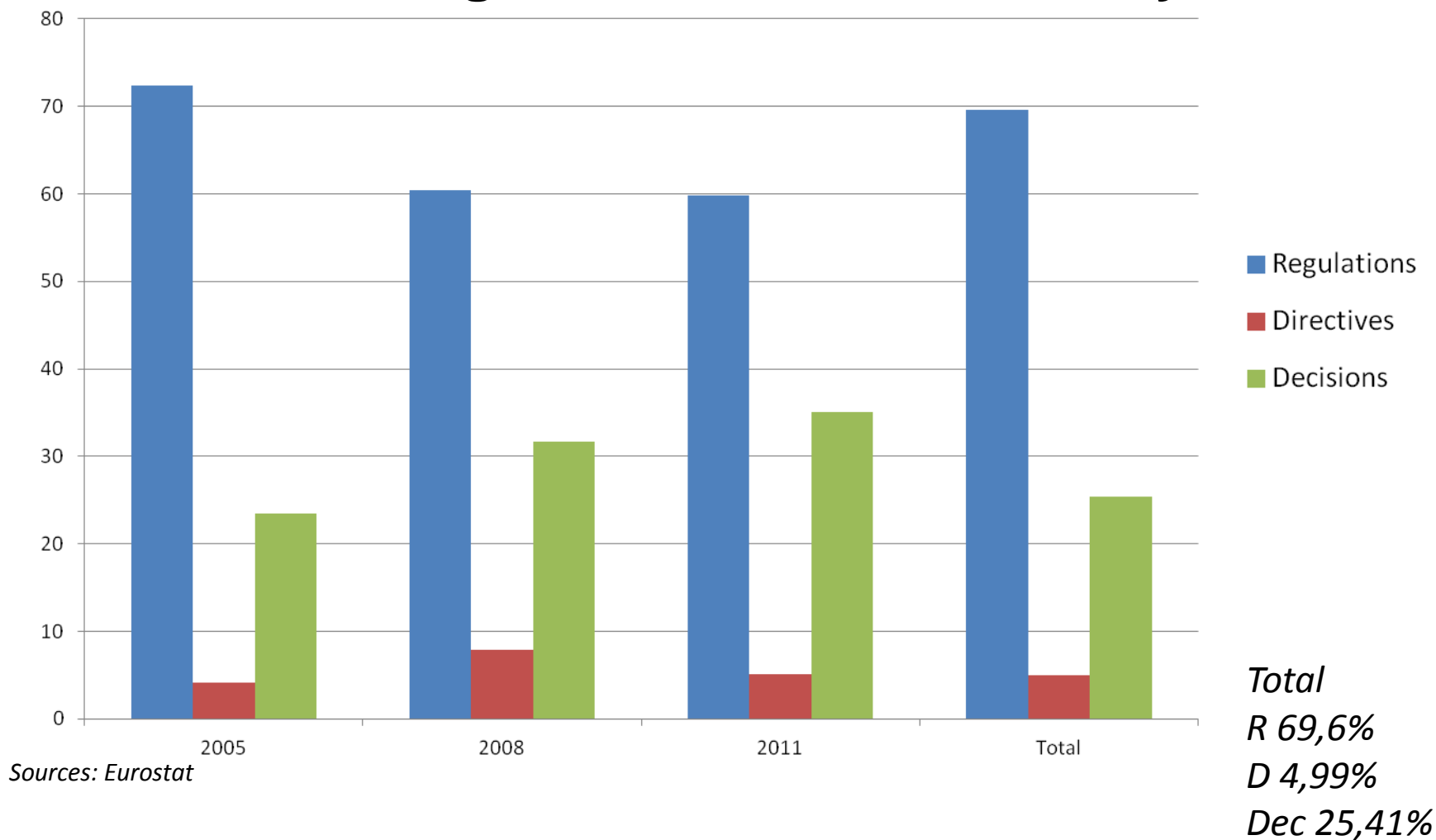
Building sustainability framework: CEN TC 350



EU initiatives & sustainable buildings

		LEGEND:						Legal	Voluntary			
		CONSTRUCTION SECTOR										
		GENERAL										
		Present MFB focus										
		Future Additional MFB Focus										
		EU POLICIES & STANDARDS								OTHERS		
Main objective:		INTERNAL MARKET	ENERGY EFFICIENCY	ENVIRONMENTAL EFFICIENCY								
L A W S & S T A N D A R D S	B U I L D I N G & P R O D U C T	EUROCODES Standards Compulsory DG ENTR	ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE & Standards Compulsory - Under implementation DG ENER	ECOLABEL REGULATION Voluntary ecolabels DG ENVI	GREEN PUBLIC PROCUREMENT Compulsory? - Under development DG ENVI	WASTE DIRECTIVE Compulsory? DG ENVI	SUSTAINABILITY OF CONSTRUCTION WORKS Voluntary CEN TC 350 (DG ENTR)	SUSTAINABLE BUILDING RATING SCHEMES Voluntary Private/national				
		Common design approach	Holistic optimization Use-phase only Energy consumption focus Scope: - New buildings - Major renovations	Awarded to best products only Life-cycle Various criteria Methodologies: PEF / MEErP Scope: - Everything*	Core criteria: Energy efficiency Comprehensive criteria: Ecolabel Methodologies: PEF / MEErP	Waste prevention & reduction Art. 9: Prevention of waste (b) Construction & demolition waste	Building assessment EN15978	Building assessment - HQE - DGNB - BREeAM - LEED... - RICS Carbon Footprint... Sustainable Building Alliance				
		Sustainability Dimension Connected with * and **				2013 Study on review of recycling targets						
		CONSTRUCTION PRODUCTS REGULATION & Standards Compulsory - Under implementation DG ENTR	Minimum requirements Use-phase only Scope: - Technical building systems (boilers...) - Renovation of building elements (windows...)	Several product groups - Office buildings - Windows (tbc)	Several product groups - Office buildings (tbc) - Windows: criteria under revision	Recyclability study	Environmental Product Declarations EN15804 Life-cycle Various environmental impacts without political judgment	Product assessment - FDES - IBU-EPD - BRE Green Guide - MRPI...				
		Common technical language Declaration of performance CE-Mark Harmonized standards (hENs) European Technical Approvals (ETAs) New/extended basic requirements: - 3: Hygiene, health & environment - 7: Sustainable use of natural resources ... Scope: Construction products	ENERGY LABELLING DIRECTIVE Compulsory - Revision tbc DG ENER	ECODESIGN Compulsory - Revision tbc DG ENTR		recyclability standard			ECO platform			
		Minimum requirements - Legally feasible - Not implemented so far	Rating to promote best products A/B/C... Label Use-phase, extension to lifecycle possible Energy consumption or others Methodology: MEErP Scope: - Energy related Products* Several product groups - Windows will be studied * Except transport means	Minimum requirements CE-Mark Life-cycle Energy consumption and other criteria Methodology: MEErP Scope: - Energy related Products* Several product groups - Windows: criteria under revision * Except transport means	BIO-BASED PRODUCTS Standards under development, connected with **** CEN TC 411, Mandates M429 & M492							
		COMMISSION INITIATIVES	CONSTRUCTION ACTION PLAN DG ENTR 31-jul-12	SUSTAINABLE CONSUMPTION & PRODUCTION ACTION PLAN Under revision DG ENVI	SUSTAINABLE BUILDINGS COMMUNICATION DG ENVI Stakeholder Consultation Q4 2012	RESOURCE EFFICIENT EUROPE Roadmap DG ENVI 20/09/2011 PEF Methodology						
			SUSTAINABLE CONSTRUCTION LEAD MARKET INITIATIVE DG ENTR		**** BIO-BASED PRODUCTS LEAD MARKET INITIATIVES DG ENTR							
		COMMISSION FLAGSHIP INITIATIVES		RESOURCE EFFICIENT EUROPE DG ENVI								
				INDUSTRIAL POLICY DG ENTR								

Being active at EU levels is key



Sources: Eurostat

Regulation: The new CPR = same in 27 countries

And Brussels: the place to be !



**Second place after Washington
in terms of:**

- number of lobbyists (15 to 20.000)
- Number of journalists (1300 accredited)



**Multiplicity of stakeholders
Preference of the EU institutions to dialogue with EU representations
Capacity to build « Alliance »**

“Metals For Buildings” Alliance

- MFB is intended:
 - To represent the common interest of its members
 - To promote and lobby In favour of the sustainability & recyclability of metals for buildings
- An alliance of 11 European metal associations
 - All active in the building sector
 -
- Initiated 2011 & official membership in 2012
 - By-laws in 2013
- Based on the positive experience within CEN/TC350
 - Strong common actions in favour of “module D” integration

11 European metal associations



Metals in buildings contribute strongly to EU economy

- Metal products in buildings:
 - > €100 Bn annual turnover
 - > 500 000 direct jobs
- But also huge indirect impacts:
 - > 200.000 erecting companies in EU
 - Distributors & transport,...
 - Equipment manufacturers, services, ...
 - Dismantling and recycling process,...

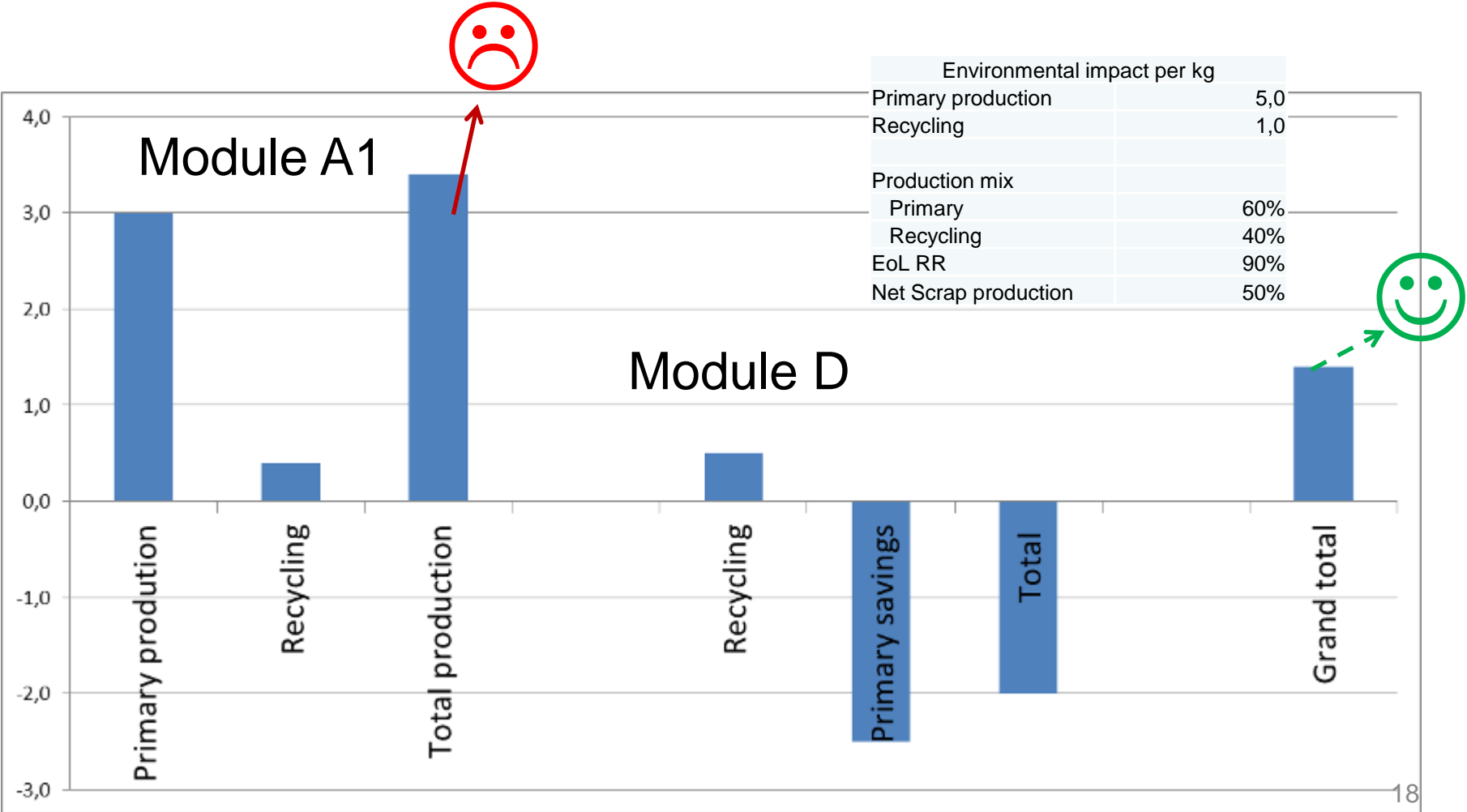
MFB objectives and activities

- Objectives
 - Communicating and advocating the sustainability dimension of metals in buildings
 - Stressing that end of life recycling of metals in building is a today fact/reality.
 - Securing that regulations, associated methodologies, standards and other EU documents credit properly the recyclability and the end of life recycling of metals in buildings
 - Advocating appropriate allocation methodologies in LCA/EPD
 - Promoting « End of life recycling » vs. « recycled content »
- 2012 activities
 - June 20th: Official launching with EU VIPs - MeP & Commission
 - Website, Leaflets, press release
 - Workshops (June & September) with EU commission
 - Activities per « task force » on each relevant topic

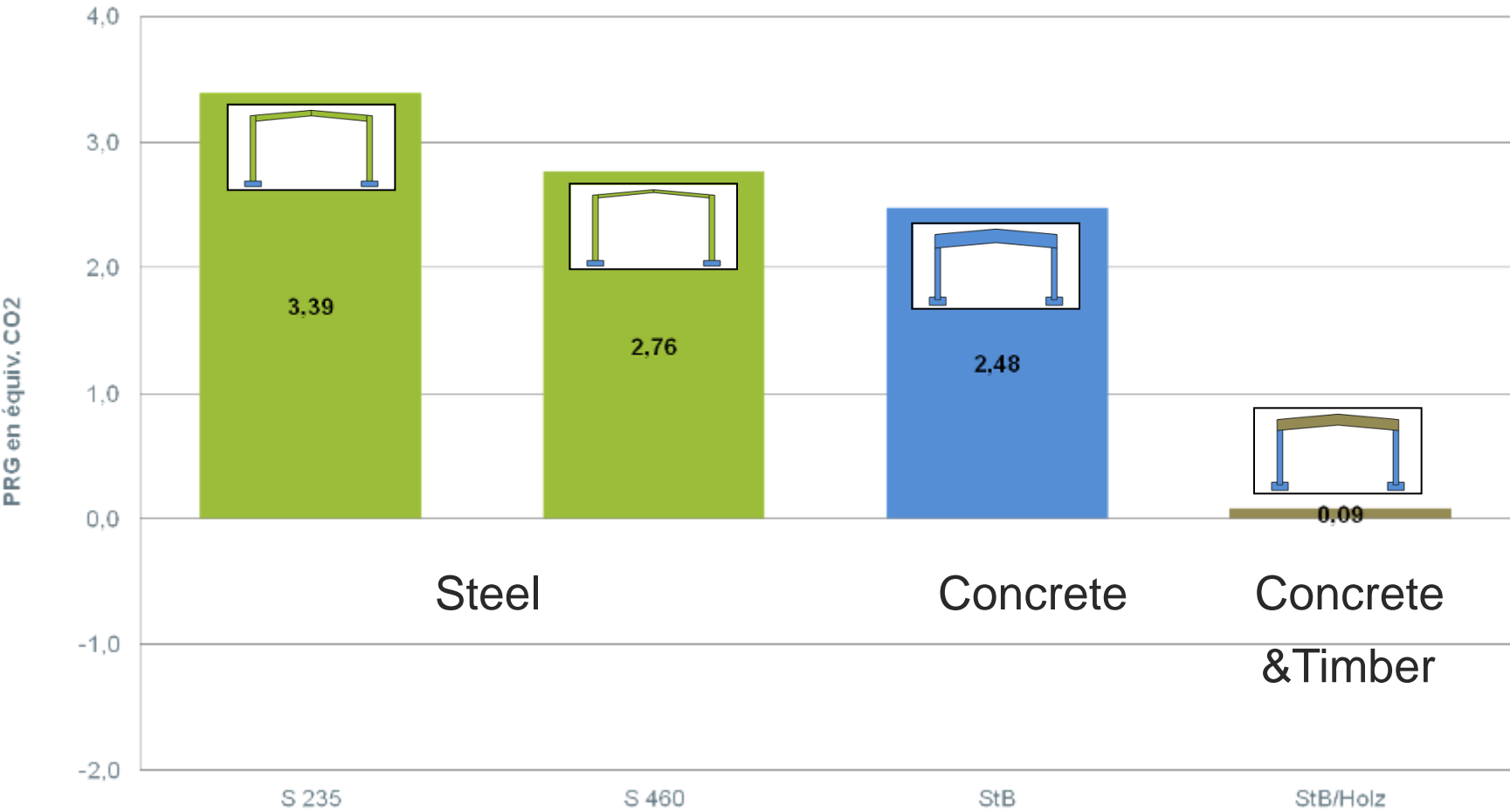
MFB focus & task forces

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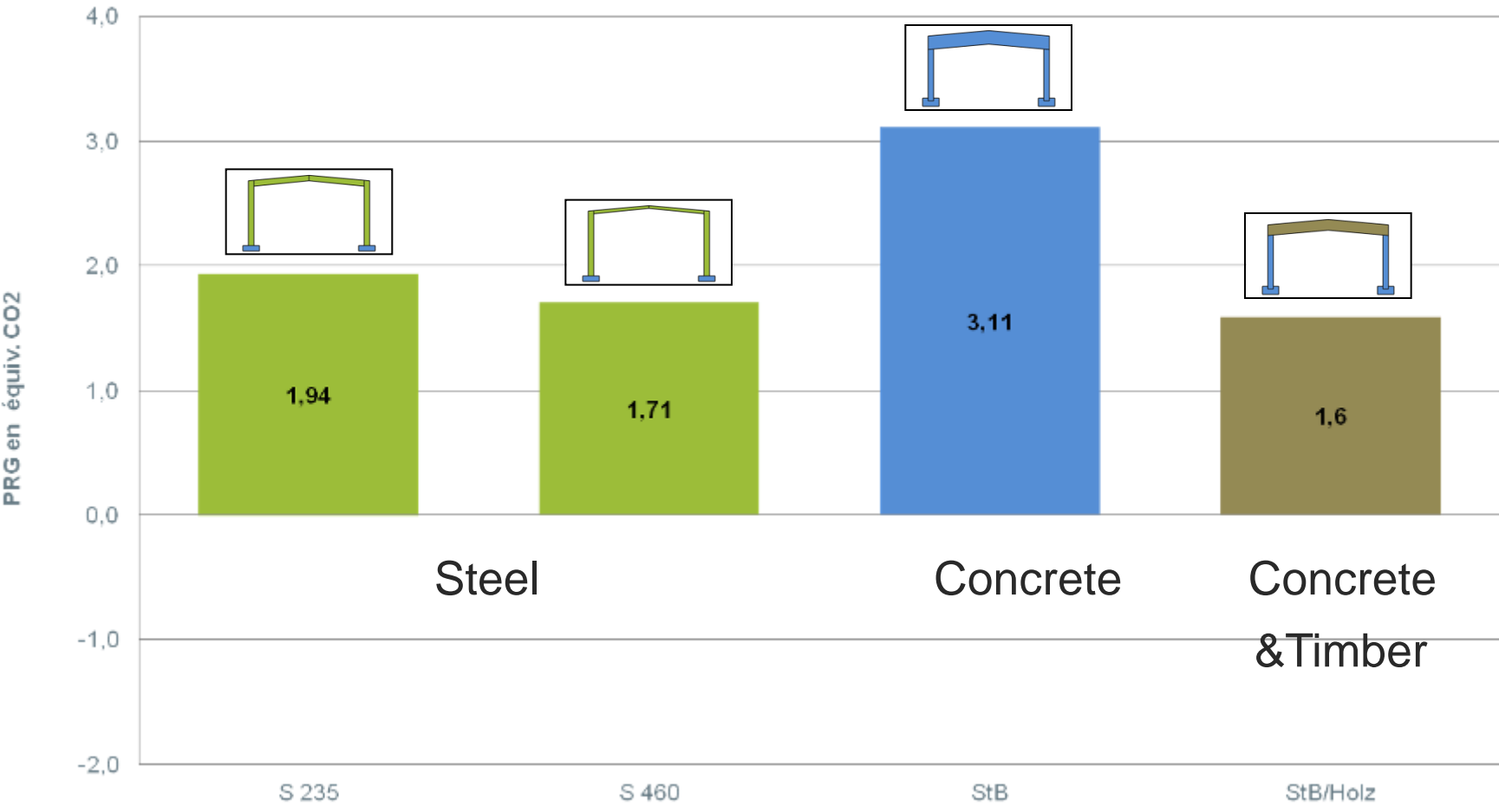
Why are recyclability and « Module D » key for us?



LCA – GWP impact : Module A+B without « module D »

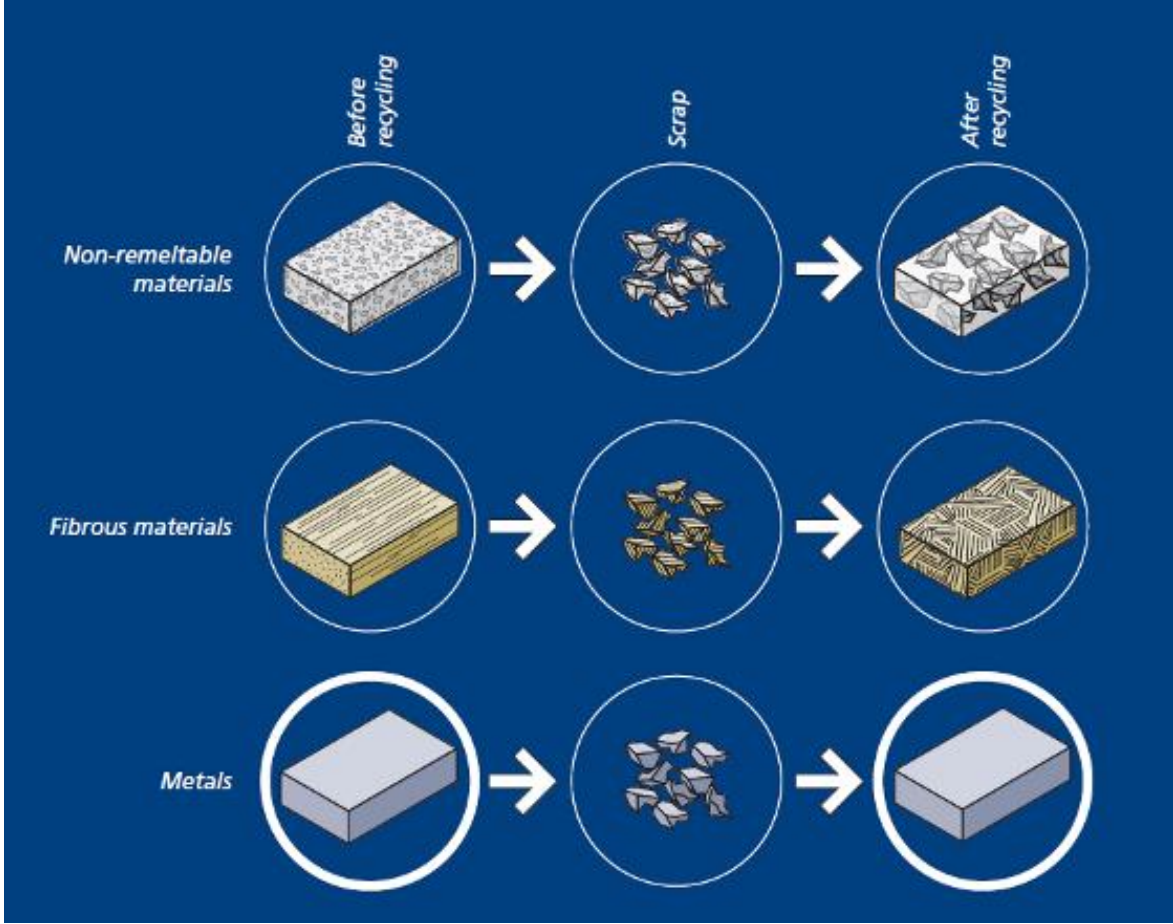


LCA – GWP impact : Module A+B with « module D »

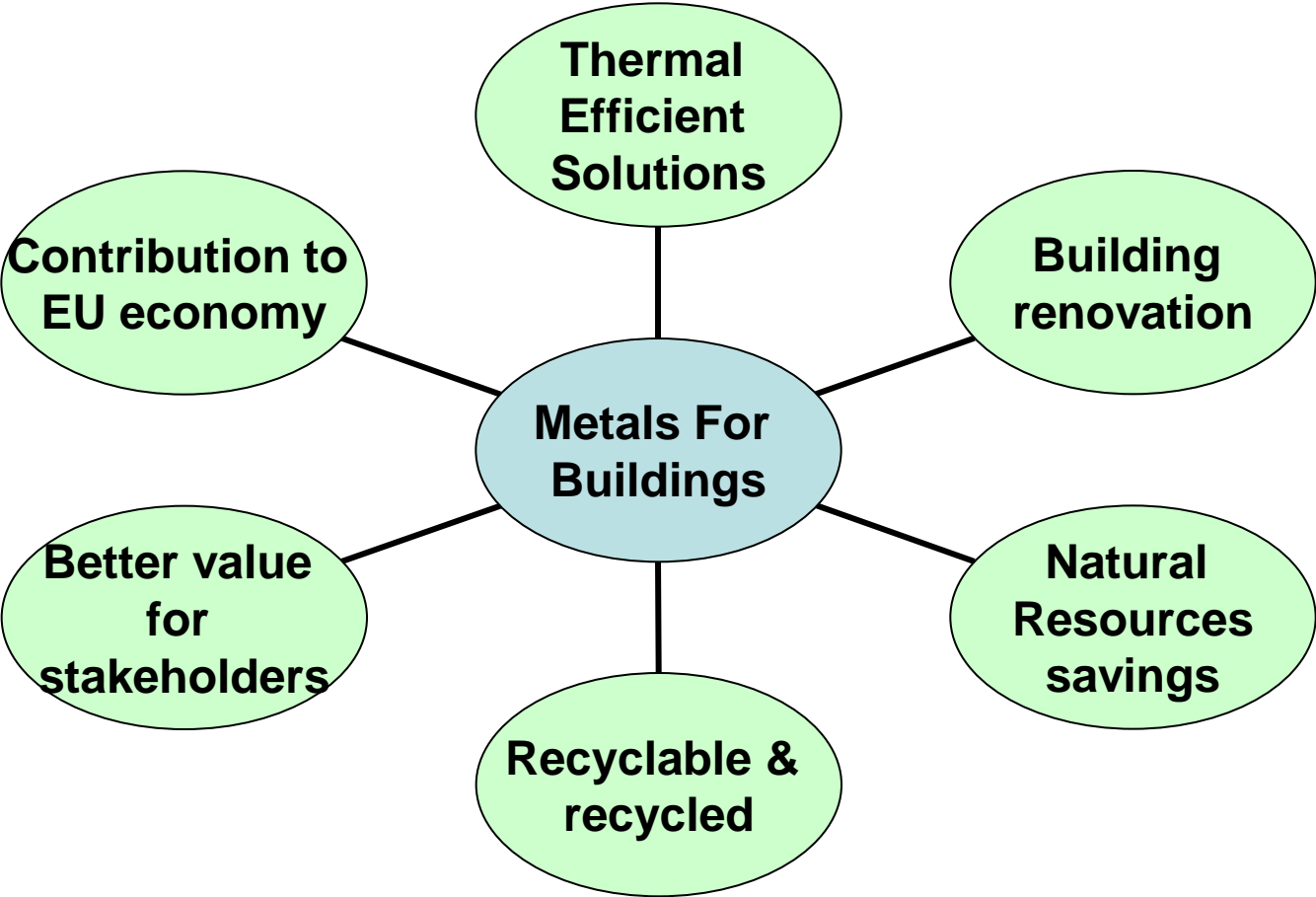


Metals in buildings are efficiently and economically recycled

- Today, > 95% of the metal products used in buildings are collected at end-of-life.
- Life cycle cost :Metals in Buildings could be part of asset management
- High economic value for this systematic dismantling, collection and recycling.
- Energy savings between 60% and 95% compared to primary production, with potential upgrading



Permanent resources for the next generations



European environmental legislation have to consider those unique performances

Metals for Buildings Alliance: 2013 next steps

- Constant advocacy actions on current EU initiatives
 - CEN TC 350,.....
 - Ecodesign, Ecoplatform, Ecolabel,...
 - Communication
- Work with EU Parliament
 - Approach MoP for exchanges
 - Create an « inter-group »
- Become CEPMC full member
 - To be at the board, like concrete or timber
 - Organize our contribution to WGs

Our main issue: Present footprint = 1.3 earth



Metals for Buildings could be part of the solution²⁴

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Thank you for your attention

