A construction worker wearing a yellow hard hat and a red jacket is looking upwards and to the right. He is holding a yellow vertical pole. The background shows a construction site with wooden framing.

Revision of the EPBD: view of contractors
Sue Arundale, Director
Technical and Environmental Affairs

05/10/2017

ENTERPRISES

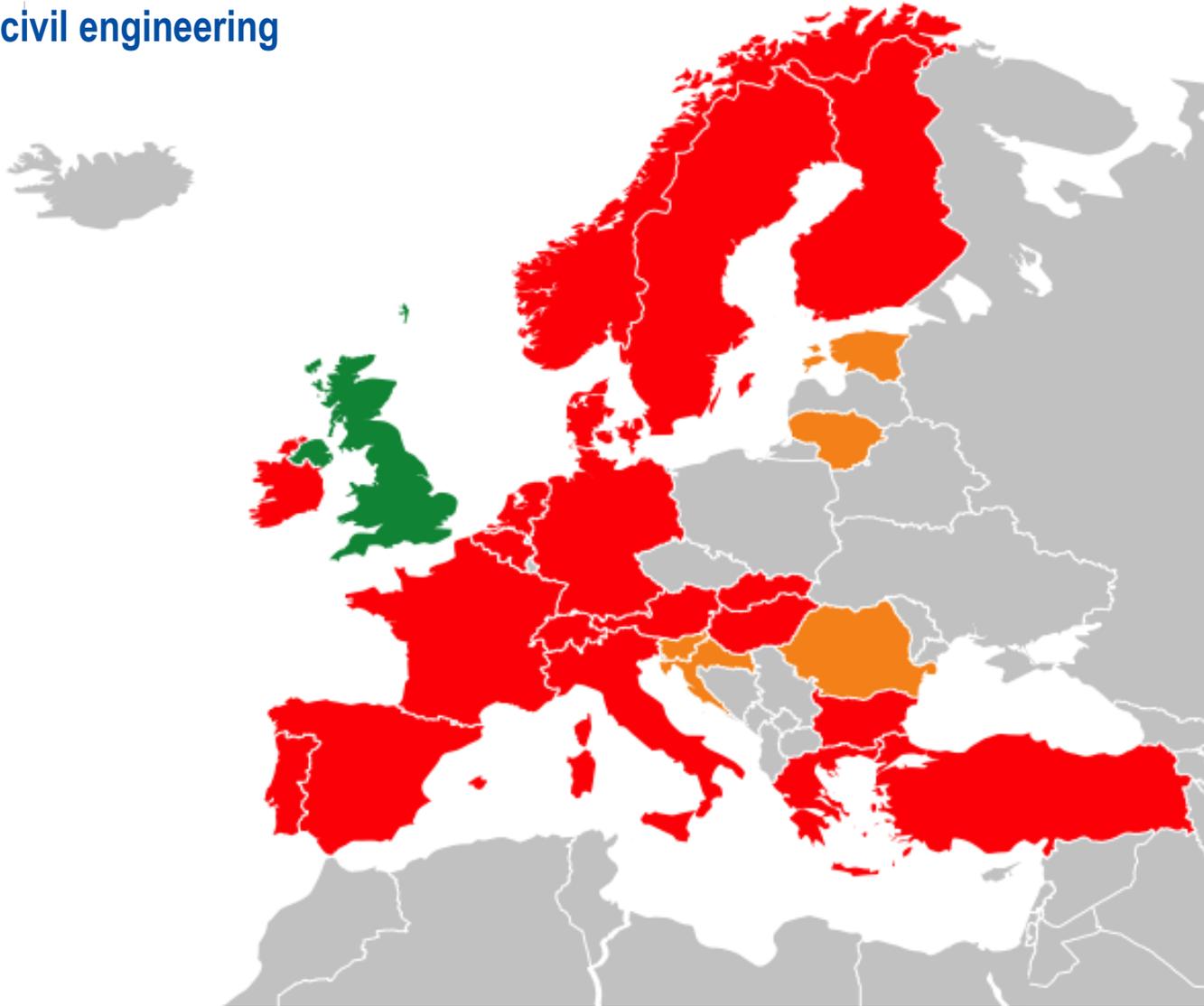
- of all sizes
- active in all fields of building and civil engineering



1905
1st meeting

26
Countries

29
Federations



- | Full members | Observer members |
|--------------|------------------|
| Denmark | Estonia |
| Netherlands | Romania |
| Germany | Slovenia |
| France | Croatia |
| Spain | Lithuania |
| Luxembourg | |
| Bulgaria | |
| Finland | |
| Norway | |
| Sweden | |
| Ireland | |
| Belgium | |
| Portugal | |
| Switzerland | |
| Austria | |
| Italy | |
| Cyprus | |
| Greece | |
| Hungary | |
| Slovakia | |
| Turkey | |
- Co-operation agreement**
- United Kingdom**

EPBD: our original position

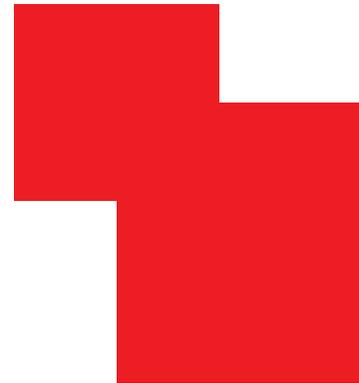


- Improvement in deep renovation rates essential
- Premature to compare EPCs to justify funding
- Ecodesign to be aligned with CPR?
- Infrastructure for e-mobility
- Smartness indicator: how will it work?
- EPBD should be compatible with DG ENV voluntary assessment framework

Experts



- All experts involved in assessing energy savings following renovation – and in producing Energy Performance Certificates, building passports or any other similar document - must be properly trained and competent



Renovation

- Energy renovation extremely important...
- However...
- Need to include other essential upgrading work in a deep renovation:
 - Fire protection
 - Structural work (earthquake zones, flood protection, removal of toxic substances)
 - Strongly support ITRE amendments 99 and 100, which reflect above
 - Accessibility
- NZEBs that are unsafe or unhealthy are a massive waste of investment and time

Industry 4.0 and BIM



- **Policy makers need to be thinking about this now**

How could we use digital methods in renovation?

Robots and drones already in use e.g. dangerous processes and surveying

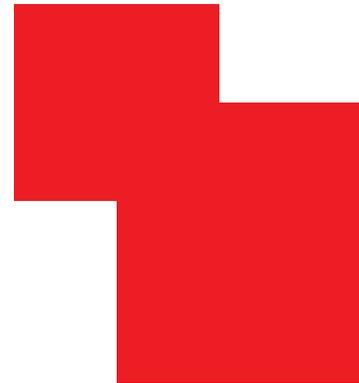
Pre-fabrication a possible solution

- However, off-the-shelf kits not always the most effective, energy saving solution

- **FIEC is looking at all of this**

Working Group on Construction 4.0 (including BIM)

Replaced BIM Working Group, which operated from Sept 2016-Sept 2017



Changing the market



- **Demand is slow and deep renovation expensive and disruptive**
- **Creating a tipping point**
 - Changing perceptions about energy consumption, design of buildings, changing climate and new risks
- **Acceptance of new methods, mentioned above**
- **Acceptance that demolition will sometimes be preferable to renovation**
 - Comprehensive assessment by experts needed to weigh up cost/benefit

Amendments - ITRE



- **FIEC very supportive of the Rapporteur's original amendments (1-58)**
- **Rest of ITRE's amendments (59-629) more problematic:**

Duplication of indicators/aspects covered by DG ENV voluntary assessment framework Level(s)

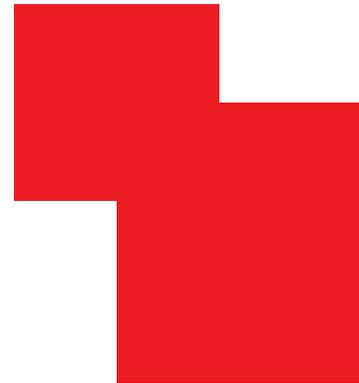
Oversimplified solutions for renovation

Ecodesign

Specific technologies favoured (FIEC advocates "technology and material neutrality")

No mention of digital construction and "passports" not linked to BIM (so not future-proofed)

Possible loophole regarding public buildings



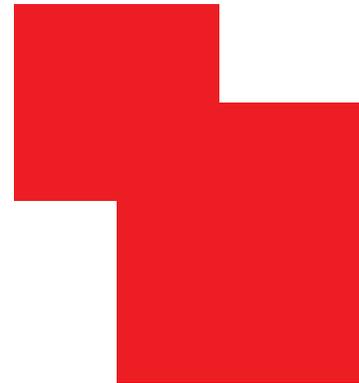
Amendments - ENVI

- 334 amendments – FIEC supported many
- ENVI final report adopted – 82 amendments
 - Some that we supported were deleted
- **Problem areas:**
 - Delegation of implementing powers to European Commission
 - Inclusion of new aspects in EPCs – (already a problem)
 - Inevitable increases in costs for clients posed by some demands

Latest



- **FIEC's latest reaction**
Our conclusions at this point
- **Vote expected 11/12 October**





COMPETITIVENESS
GROWTH
ENERGY NETWORKS
EMPLOYMENT

SOCIAL INFRASTRUCTURE
BIM
WATER NETWORKS
ENVIRONMENT

TRANSPORT INFRASTRUCTURE

IT-NETWORKS
ENERGY EFFICIENCY

CONSTRUCTION IS THE SOLUTION INDUSTRY

YOUTH EMPLOYMENT
RESOURCE EFFICIENCY

JOB
SKILLS TRAINING/EDUCATION

ENERGY PRODUCTION
STANDARDISATION
INFRASTRUCTURE
INNOVATION

CLIMATE CHANGE
RECYCLING