3rd Online Mini Workshops Series
Renovation Wave: Enablers and Accelerators for Ambition

3rd Webinar

Think Big! Industrialisation of energy renovations: the best route to scale up the Renovation Wave?

14th of January, 2021
(09:30-11:10 CET)
Via GoToMeeting

For more information:
eva.brardinelli@euroace.org
Welcoming

Hélène Sibileau
EuroACE Senior EU Affairs Manager
Instructions

• You are kindly asked to remain muted
• No cameras for the whole duration of the webinar
• Only speakers and moderator will stay unmuted
• Two Q&A sessions will follow each panel discussion
• Ahead and during the Q&A session, questions will have to be sent to “Everyone” in the GoToMeeting chat box.
• Questions should be as concise as possible
• The moderator will group questions and then address them to the speakers
• If time does not allow to cover all questions, they will be forwarded to the speaker for later response
• The PowerPoint presentation and questions will be shared with you in due course
Formal Introduction

Céline Carré
EuroACE Vice-President (Saint-Gobain)
The European Alliance of Companies for Energy Efficiency in Buildings

- Formed in 1998 by Europe’s leading companies involved with the manufacture, distribution and installation of energy saving goods and services
- A business association working together with the European institutions to help Europe move towards an efficient use of energy in buildings (new and renovated)
EuroACE – Energy Efficient Buildings

** More than 220,000 employees & more than 1,100 production facilities and office locations in the EU **

Our specificity: our cross-sector representativeness
We represent all energy efficient technologies
>>> heating & cooling equipment, insulation, lighting, maintenance regimes and controls, ventilation equipment & windows
We believe that improving the energy efficiency of buildings, especially renovating existing buildings, is the most cost-effective method of:

- Creating employment and securing economic growth
- Alleviating energy poverty on the long-term
- Providing people with comfortable and healthy homes
- Meeting carbon reduction targets
- Achieving energy security
EU-wide political communications campaign
Focuses exclusively on ambitious energy renovation of the building stock, motivating EU and national institutions to take action
46 partners, including 18 at national level
High political support with the Champions Together for Renovation

PrioritisePeople
#AccelerateRenovation
#Renovate2Recover
Today’s agenda

09:40-09:50 | Hands-on experience of industrialized renovations: scaling up Energiesprong approach in Europe
Sebastien Delport, Greenflex

09:50-10:00 | How to promote industrial renovation in EU Policy, and what it means for skills in the construction sector?
Sibyl Steuwer, BPIE

10:00 - 10:10 | How to upskill workers to deliver the Renovation Wave?
Tom Deleu, EFBWW

10:10 - 10:25 | 1st Round Q&A

10:25-10:35 | European Skills Agenda flagship initiative: The Pact for Skills
Felix Rohn (DG EMPL, European Commission)

10:35-10:45 | The Blueprint for a sectoral skill strategy in construction and other initiatives
Roman Horvath (DG GROW, European Commission)

10:45-11:05 | 2nd Round of Q&A
A hands-on experience of industrialized renovations: scaling up EnergieSprong approach in Europe

Sébastien Delpont
Associate Director, Greenflex
Director, EnergieSprong France
Un projet porté par GreenFlex
Un programme financé par CEE
Avec la supervision de EuroAce

Scaling up EnergieSprong approach in EU - Think Big!
Deep energy retrofit being expensive is a fact but not a fatality. Let’s work on making cheaper deep retrofit a reality.

Low digitalization

Sector
- ICT
- Media
- Professional services
- Finance and insurance
- Wholesale trade
- Advanced manufacturing
- Oil and gas
- Utilities
- Chemicals and pharmaceuticals
- Basic goods manufacturing
- Mining
- Real estate
- Transportation and warehousing
- Education
- Retail trade
- Entertainment and recreation
- Personal and local services
- Government
- Healthcare
- Agriculture and forestry

Low productivity level

Productivité horaire apparente de 1960 à 2013
Base 100 : 1960, données de l'OCDE

Industrie
Un développement technologique et des procédés qui évoluent avec le temps

Construction
Seul secteur à avoir connu une décroissance de sa productivité depuis 2000
Developing a radical and simple market segment is a key approach to activate innovation through all the value chain.

Ambitious & clear (zero pesticide): it works even if more expensive

Luxury : Tesla

Less ambitious & less clear: its does not work even if cheaper

Break : ?

Mid size: ?

Small: Zoé
No agri transition without organic, no retrofit scale up without a key E=0 market segment among others

4 sizes for « ready to wear » industrial retrofit

Getting out of the « 100 buildings = 100 energy specifications»

EnergieSprong is not the only approach but it is one that aims at fostering market trust, innovation and investment
Aiming at aligning all stakeholder interests to make such a net zero market segment emerge, adjusting to national context.

Such an approach of publicly funded « intermediation of general interest » by a market development team is efficient and innovative.
No long term climate ambition will be reached if we don’t manage to develop 20 to 35% market share segment of A label retrofit.

Let be realistic, technically no all building can reach technically B level, a market segment of A level retrofit will be needed to compensate for that.
The technical market for such « off site » deep energy retrofit is massive: in France, about 15 millions housing could be retrofitted this way.

- 26,6 millions housing analyzed...
- ...including 22,8 millions with a need for retrofit* (~86% of the portfolio)

**E=0**

Rénovation EnergieSprong

- **9,5 Millions** housings
  - 9 private market & 0,5 M social housing

**E>0**

Rénovation EnergieSprong Ready

- **4,7 Millions** housings
  - 3 M private market & 1,7 M social housing

*logements classés à partir de l’étiquette D*
Since 4 years, development to adapt the approach in France is on, with early success and many challenges still ahead.

6600 housing to be retrofitted

- Bretagne: 500 logements
- Hauts de France: 1000 logements
- Ile-de-France: 100 logements
- Pays de la Loire: 2550 logements
- Auvergne-Rhône-Alpes: 2400 logements
- Nouvelle Aquitaine: 50 logements

Price curve going down but still expensive
More projects delivered and more projects to be launched, a small wave for now, but that aims at scaling up.

Projects being built

- **Est métropole habitat**
  - 980 collective housing

- **Vilorgia**
  - 160 individual housing

Project to be procured

- **Podéliha**
  - 60 logements collectifs

- **Vilorgia**
  - 35 logements collectifs

- **Opac38**
  - 32 logements individuels

- **L’Union sociale pour l’Habitat des Pays de la Loire**
  - ~2500 logements

- **Domofrance**
  - 50 logements individuels
From a Dutch approach to an EU wide approach: supporting spreading the approach adjusting to each domestic market

<table>
<thead>
<tr>
<th>Country</th>
<th>Phase 0</th>
<th>Phase 1</th>
<th>Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL</td>
<td>1000</td>
<td>3000</td>
<td>100</td>
</tr>
<tr>
<td>UK</td>
<td>25</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>FR</td>
<td>25</td>
<td>0</td>
<td>200</td>
</tr>
<tr>
<td>DE</td>
<td>100</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Future!

- More volumes
  - In social housing
- More building types
  - In schools, districts & private housing
- More countries
  - Italy as a next market

Associated EU fundings

Transition Zero
Market penetration of deep energy retrofit will depend on TCO cost & revenue, let’s keep acting to make them more affordable.

This will be key to drive up ambition of energy retrofit projects, reinjecting more and more energy budget into investment.
Join the movement!

Sébastien Delpont
Directeur EnergieSprong France
& Directeur Associé, GreenFlex

Email: energiesprong@greenflex.com
Site web: http://www.energiesprong.fr/
Twitter: @EnergiesprongFR
How to promote industrial renovation in EU Policy, and what it means for skills in the construction sector?

Sibyl Steuwer
Head of BPIE Berlin - Buildings Performance Institute Europe (BPIE)
How to promote industrial renovation in EU Policy and what does it mean for the skills in the construction sector?

Dr. Sibyl Steuwer, Head of BPIE Berlin

Think Big! Industrialisation of energy renovation: the best route to scale up the RW?, EuroACE Webinar

14 January, 2021
Approaching industrialised renovation
Defining industrialisation of renovation

- **Comprehensive** and integrated building renovation
- Digital, smart and integrated renovation solutions, supported by the new Smart Readiness Indicator
- **Aggregation** of projects eases financing and prefabrication of building modules
- Fast renovation on-site

**Industrial prefabrication**
- Standardised modules
- Adaptable to the individual design
- Versatile combination

**Process optimisation**
- Standardised processes
- Funding opportunities
- Innovative business models

**Digitalisation**
- Digital measurement/ BIM
- Automatic data readability
- Building monitoring
Renovation Wave – what’s in it for industrialised renovation?
Renovation wave – what’s in for industrialised renovation?

Expected benefits

- Cheaper and quicker renovation with limited impact on the residents
- Particular relevance for social housing
- Faster digitalisation
- Full integration of circularity principles across the value chain
- District level: cheaper ways to decarbonise heating and cooling, system efficiencies, increased flexibility and thermal storage, space for nature
## Renovation wave – what’s in for industrialised renovation?

### Expected benefits
- Cheaper and quicker renovation with limited impact on the residents
- Particular relevance for social housing
- Faster digitalisation
- Full integration of circularity principles across the value chain
- District level: cheaper ways to decarbonise heating and cooling, system efficiencies, increased flexibility and thermal storage, space for nature

### Announced action
- Efficiency purchase agreements based on smart measuring of the actual savings
- Unified EU Framework for digital permitting in the built environment
- Trusted scheme for certifying energy efficiency meters in buildings
- European Initiative for Building Renovation: EIB support for aggregation of projects
- Pact for Skills, European skills agenda
Insights from practice
Important drivers for industrial renovation

- **BIM**
  - Building Information Modelling in existing buildings

- **MEPS**
  - A constant high demand for deep renovations enables the development of industrial solutions, incl. large-scale production facilities

- **Process innovation**
  - Introducing a Digital Building Logbook, and an updated EPC framework will enable a more digital and systematic data collection

- **Better buildings data**
  - Upskilling of construction workers is essential to exploit innovative technologies, such as BIM, 3D printing and robotics

- **Digital skills**
  - A supportive policy framework and long-term targets ensure planning security for manufacturer and solution providers

- **Policy framework and financial support**
Cost reductions in the Netherlands

- From initially > 100,000€ per renovation to currently around 70,000-77,000 €
- Target: 45,000€

Initial effects partly due to economic downturn – full books lead to slow down of effects

Labour cost reduction

Reduction of costs due to failure

Time savings
BIM – maturity and application – Germany (2015)

- **2D BIM (drawing)**
- **3D BIM (creation of graphical and non-graphical information)**
- **4D BIM (including time management)**
- **5D (including cost analysis)**
- **6D (including sustainability assessment)**
BIM – maturity and application – Germany (2015)

- BIM not used for majority of projects and rather used in large construction project (> EUR 25 mio.); Online survey revealed that 96% of respondents still share information in paper form or PDF
- Only 25% of German stakeholders (planners, construction companies, skilled workers) believe in the widespread use of BIM (20% don’t know BIM, 14% used it for more than a year)
- Potential for an increased use of BIM: 59% of respondents experience problems at the interface of planning, execution and completion due to different software and missing interoperability
- Wooden construction market most advanced in application of prefabrication and digitalization and takes a leading role in Germany
- Renovation projects typically individually and separately according to the different trades by the skilled workers on-site; associated with considerable effort, especially in the case of subsequent installation of technical system components
  → Industrialised renovation approaches potential to drive BIM implementation
State of play of implementation of BIM in the EU

• EU BIM Task Group (2016-2018) mainstreamed implementation in the public sector but uptake still limited (29% of European construction companies use BIM 3D, 61% have never used it; limited experience among SMEs)

• BIM standards adopted to create a common language when sharing information (CEN/TC 442: IFD (ISO 12006-3:2007), IFC (ISO 16739:2013) and IDM (ISO 29481-2:2012))

• BIM is commonly applied for large-scale residential construction projects, and for transport and water infrastructures (design and construction rather than operation and maintenance phase)

• Largest application in Denmark (78% of design companies use BIM 3D) and France; Estonia and Poland have high growth rates

European BIM market
2016
EUR 1.8 billion

European BIM market
2023 (expected)
EUR 2.1 billion
Possible Action and Outlook
Possible EU Action

Net-zero concepts

- Ambitious and progressive minimum requirements (MEPS)
- Support district approaches that especially explore industrialised renovation approaches
- European Bauhaus as opportunity to start a discourse on functionality and aesthetics of industrialised renovation

BIM

- Require Member States to report on progress of BIM
- Better explore potential for BIM in renovation progress, e.g. via research programmes, within BIM Task Group
- Good practice exchange

National recovery plans as an opportunity to support industrialized renovation

- Direct financial support for prefabrication
- Regional renovation platforms and one-stop-shops
- Standardised model contracts and blueprints for performance guarantees
- Public tenders requiring a minimum projects size
- Renovate whole districts making use of industrialised processes, setting up pilots
Skills: three concluding thesis

Increased digitalization and automatisation in energy renovation and building maintenance will attract skilled worker and promote respective education/trainings.

Industrialised renovation will require less labour – indication that biggest cost reductions are achieved here – this will solve parts of the lack of skilled workforce problem.

Performance guarantees requiring minimum quality will lead to the reorganization of process and the entire value chain. This will lead to a re-organization of the value chain and new job profiles.
The Renovation Wave – a way forward

In a climate-neutral Europe, buildings will be...

- Healthy and foster well-being
- Part of the energy system infrastructure
- Highly energy efficient
- Circular in relation to their material
- Fossil fuels free
- Resilient to climate risks

Financial institutions
European Union
National governments
Local authorities
Building owners
Building designers
Contracting & construction
Manufacturers
Suppliers of energy efficiency, cooling, and heating
Suppliers of electricity and heating

10 years BPIE
Thank you...

Dr. Sibyl Steuwer, Head of BPIE German office

sibyl.steuwer@bpie.eu

www.bpie.eu
How to upskill workers to the deliver the Renovation Wave?

Tom Deleu
General Secretary, European Federation of Building and Woodworkers (EFBWW)
How to upskill workers to deliver the Renovation Wave?

Tom Deleu, general secretary EFBWW
**EFBWW** = the European Trade Union Federation grouping 75 national trade union federations from 34 countries with members in the Building, Building Materials, Wood, Furniture, Forestry and Allied sectors.

➢ More about us at [www.efbww.eu](http://www.efbww.eu)
• EGD and Renovation Wave **will impact all sectors** in which EFBWW is involved; Challenges will present themselves differently in building, wood and forestry and cement industry.

• For the building industry we expect that the EGD and the Renovation Wave, especially in the context of the EU Recovery Strategy will have an important positive impact > more ambitious energy standards for buildings > more investments (available funding?) > more work for the industry > more jobs.

• However :
  * How will the available money in the Resilience and Recovery Fund be used on national level? How will the EC give follow-up the translation of EU ambitions into national action plans.
  * What kind of jobs ~ Are the workers available?
Are the workers available? And do they have the right skills?

- According to EC projection, 160,000 new green jobs in the construction industry already today a lack of (skilled) workers

- Need for training + up-skilling and reskilling related to the twin challenge of ecological / digital transformations

How to (upskill workers) deliver the Renovation Wave?

Is the construction industry ready to meet the challenge?
Boost attractivity of the sector!

- Attract new workers (young and female workers) + to keep them in the sector > Renovation Wave = opportunity to create quality jobs with good salaries and working conditions + work/life balance;
  >Link with progressive Public Procurement practices << lowest price
- Promote quality apprenticeships
- A right to training and life-long learning for all workers
- Integrate migrant and mobile workers in a sustainable manner in the industry
- Address labour shortage in CEEC
- Recognition of skills + right to training and life-long learning
• Meet the twin challenges of climate change and digitalization; and adaptability / anticipate changes

• Will require companies and the industry to invest more in innovation

• Will require companies and the industry to invest more in training and skills of their workers << “easy and quick gains” related to using low-skilled and unskilled migrant workers

• Increase need for in-house knowledge and expertise, i.e. direct jobs << trend of more subcontracting (introduce)

• Develop a skills agenda fit for future / Pact for Skills (on EU and national level)

- Promote the integration of digital and green skills as a holistic and interdisciplinary approach in VET curricula and in up-skilling/ re-skilling

- Develop new training curricula and materials to quickly respond to labour market needs

- Ensure that digital and green skills integrated in the curricula are developed and updated jointly by the key stakeholders: employers, trade unions, local authorities and VET providers

...
Re-valorize the role of social partners and social dialogue in the field of VET and skills!

- Particular for the construction industry (very fragmented and many SME’s) is the role of paritarian organisations administered by social partners (TU’s + employer organizations)
  - they are close to the sectoral reality and know best the needs > Map needs for new core-profiles / needed professions; e.g. # social dialogue projects ongoing;
  - as a way to increase sustainable development and manage the transition of the industry; create a level playing field in a fair internal market
  - costs related to up-/re-skilling and life-long training; need to be borne on sectoral level
  + need for targeted financial support from EU level, (also as a part of delivering the Just Transition);
  - quid CEEC
Thank you!
Questions?
Please be patient while Hélène Sibileau reads your questions to the speakers.
European Skills Agenda flagship initiative: The Pact for Skills

Felix Rohn
Policy Officer, DG EMPL (European Commission)
European Skills Agenda

for sustainable competitiveness and social fairness and resilience
The European Green Deal
What will we do?

**CLIMATE**
The EU will be **climate neutral in 2050**. The Commission will propose a European Climate Law turning the political commitment into a legal obligation and a trigger for investment.
Reaching this target will require action by all sectors of our economy:

**ENERGY**
Decarbonise the energy sector.
The production and use of energy account for more than 75% of the EU’s greenhouse gas emissions.

**BUILDINGS**
Renovate buildings, to help people cut their energy bills and energy use.
40% of our energy consumption is by buildings.

**INDUSTRY**
Support industry to innovate and to become global leaders in the green economy.
European industry only uses 12% recycled materials.

**MOBILITY**
Roll out cleaner, cheaper and healthier forms of private and public transport.
Transport represents 25% of our emissions.
EU INDUSTRIAL STRATEGY

- GREEN TRANSITION
- DIGITAL TRANSITION
- RESILIENCE
- GLOBAL COMPETITIVENESS
ACHIEVING INDUSTRIAL TRANSFORMATION

- A deeper and more digital single market
- Upholding a global level playing field
- Investing and financing the transition
- Supporting industries towards climate neutrality
- Skilling and reskilling
- Building a more circular economy
- Embedding a spirit of industrial innovation
A EUROPEAN SKILLS AGENDA

Europe needs a bold **skills** policy for jobs in the context of lifelong learning to:

- **strengthen sustainable competitiveness**
- **ensure social fairness**
- **build our resilience**
HOW? – BUILDING BLOCKS

1. A Pact for Skills including upscaling sectoral Blueprints
2. Strengthening skills intelligence
4. Recommendation on VET
5. European Universities
6. Skills to support twin transitions
7. STEM graduates, entrepreneurial and transversal skills
8. Skills for Life
9. Individual learning accounts
10. Micro-credentials
11. Europass
12. Framework to unlock Member States’ and private investments in skills
Industrial Ecosystems in Europe

- Social enterprises, associations and cooperatives aiming at generating a social impact, often proximity based
- Retail sales
- Wholesale connected to consumers
- Building of residential and non-residential estates
- Building of roads and railways,
- Building of utilities and civil engineering
- Associated activates
- Telecommunication
- Software and programming
- Web portals
- Manufacturing of computers and equipment
- Pharmaceutical products and equipment
- Hospitals, nursing homes, residential care
- Plant and animal production
- Processing of food
- Veterinary activities
- Passenger transport and travel
- Hotels, short term accommodation
- Restaurants and catering
- Events, theme parks
- Newspapers, books and periodicals
- Motion picture, video and television
- Radio and music
- Aircraft and spacecraft production
- Military and weapons
- Satellites
- Production of textiles, wearing apparel, footwear, leather and, jewellery
- Production of electronics
- Production of motor vehicles, boats and trains, and accessories
- Their repair and maintenance
- Freight transport
- Extraction of fossil fuels
- Refining
- Manufacturing of products with high environmental impact: plastics, chemicals, fertilisers, iron and steel, paper, etc.

Industrial Ecosystems for the Recovery
Establishing a new Strategy on Construction Skills in Europe
VOCATIONAL EDUCATION AND TRAINING

More modern, flexible, inclusive, excellent, work-based, equipping young people and adults with skills for jobs

- Global reference for skills development
- Support to apprenticeships
- Platforms of Centres of Vocational Excellence
- European Vocational Core Profiles
European Alliance for Apprenticeships (EAfA) - Renewed -
RENEWED EAFA PRIORITIES

- Promoting national apprenticeships coalitions
- Supporting SMEs
- Mobilising local and regional authorities
- Reinforcing the involvement of social partners
- Increasing number of joint sectoral pledges
- Supporting the representation of apprentices in the Member States
Key Actions in Erasmus 2021-2027

**KA1-Mobility**
- mobility of higher education students and staff
- Mobility of VET learners and staff (including international)
- mobility of school pupils and staff
- mobility of adult education staff
- Language learning opportunities

**KA2 - Cooperation**
- Cooperation partnerships, including small-scale partnerships
- Partnerships for excellence (European universities, Centres of vocational excellence, Joint Master Degrees)
- Partnerships for innovation (Alliances for Education & Enterprises, Blueprint Alliances)
- Online platforms and tools for virtual cooperation

**KA3 – Policy dev.**
- Preparation and implementation of the EU general and sectoral policy agenda in education and training
- Quality, transparency and recognition of skills and competences
- Policy dialogue and cooperation with stakeholders
- Qualitative and inclusive implementation of the programme
- Cooperation with other EU instruments
- Dissemination and awareness-raising
EU investment in skills 2021–2025

European Social Fund Plus
Erasmus
HORIZON 2020 (Marie-Curie Actions)
InvestEU
EGF
European Solidarity Corps
Digital Europe Programme

+ resources from the Recovery and Resilience Facility

+ European Regional Development Fund

+ Technical support instrument
UNLOCKING INVESTMENT

- EU Funds
- Public funds
- Private funds
A EUROPEAN SKILLS AGENDA

THANK YOU FOR YOUR ATTENTION!
The Blueprint for a sectoral skill strategy in construction and other Initiatives

Roman Horvath
Policy Officer, DG GROW (European Commission)
The Blueprint for a sectoral skill strategy in construction and other Initiatives

Roman Horváth
Circular Economy and Construction,
Directorate General for Internal Market, Industry,
Entrepreneurship and SMEs
European Commission
Commission President von der Leyen:

“The best investment in our future is the investment in our people. Skills and education drive Europe’s competitiveness and innovation. But Europe is not yet fully ready. I will ensure that we use all the tools and funds at our disposal to redress this balance.”

Construction 2020 Strategy (COM/2012/0433 final)

- skills development - one of five priorities
Support of vocational education and training, in particular apprenticeships, is crucial to facilitate smooth school-to-work transitions and to increase the availability of skilled workforce.
European Construction Sector Observatory


- launched in 2015
- individual country profiles, fact sheets on individual national and/or regional policy measures, trend and analytical reports

Analytical Report (2020):
Improving the human capital basis
European Alliance for Apprenticeships (2013) the construction sector (2015)

- more than 50 construction pledges

Monitoring & Insights into VET in construction (2017)

http://ec.europa.eu/growth/sectors/construction/apprenticeships_en
Blueprint for Sectoral Cooperation on Skills – Construction Sector (ERASMUS+)


- a 4-year long stakeholders-led project (2019-2022)

- a partnership of VET providers and companies and other stakeholders

- a sectoral strategy for skills intelligence and labour-market relevant skills development
http://constructionblueprint.eu/

- improving the sector human capital basis - a new generation of digitally aware multi-skilled workers (digitalisation, energy efficiency, circular economy)

- EQF level up to 5
24 partners from 12 Member States:

<table>
<thead>
<tr>
<th>PARTNERSHIP</th>
<th>VET providers</th>
<th>Sectorial representatives</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FLC (Coordinator)</td>
<td>CNC</td>
<td>Spain</td>
</tr>
<tr>
<td></td>
<td>IFAPME</td>
<td>Confédération Construction</td>
<td>Belgium</td>
</tr>
<tr>
<td></td>
<td>SATAEDU</td>
<td>-</td>
<td>Finland</td>
</tr>
<tr>
<td></td>
<td>CCCA-BTP</td>
<td>FFB</td>
<td>France</td>
</tr>
<tr>
<td></td>
<td>BZB</td>
<td>ZDB</td>
<td>Germany</td>
</tr>
<tr>
<td></td>
<td>BFW-NRW</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AKMI</td>
<td>PEDMEDE</td>
<td>Greece</td>
</tr>
<tr>
<td></td>
<td>LIT</td>
<td>-</td>
<td>Ireland</td>
</tr>
<tr>
<td></td>
<td>FORMEDIL</td>
<td>ANCE</td>
<td>Italy</td>
</tr>
<tr>
<td></td>
<td>VSRC</td>
<td>LSA</td>
<td>Lithuania</td>
</tr>
<tr>
<td></td>
<td>CENFIC</td>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td></td>
<td>SOLSKI</td>
<td>CCIS CCBMIS</td>
<td>Slovenia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUDOWLANI (Trade union)</td>
<td>Poland</td>
</tr>
</tbody>
</table>

*EU Sectorial representatives*

<table>
<thead>
<tr>
<th>FIEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFBWW</td>
</tr>
<tr>
<td>EBC</td>
</tr>
</tbody>
</table>
- Status Quo
- innovative initiatives dealing with skills gaps – Interactive Map
- analysis on current training needs
- analysis of available training
- development of a new training (modules, platform)
- piloting (600)
- WatchTower for future skills needs in construction
Blueprint for sectoral cooperation on skills: supporting measures for the construction sector (COSME)

- occupational health and safety (OSH)
- December 2018 – October 2020 (22 months)

Development of selected European vocational modules on OSH in the construction sector, on the basis of identified skills needs for specific occupation profiles in construction, especially for working with new construction and insulation materials, technologies and individual processes (including relevant equipment).
Modules:

1. Insulation materials
2. Finishing materials
3. Bituminous materials
4. Sustainable materials
5. Insulation operations
6. Inverted green roofs
7. Renewable energy systems
8. Waste management

PDFs & Platform
Pact for Skills

https://ec.europa.eu/social/main.jsp?catId=1517&langId=en

- concrete actions of stakeholders to upskill and reskill workforce

Report from the initial roundtable of the construction sector:

http://ec.europa.eu/social/BlobServlet?docId=23282&langId=en
During the last decade there was almost 200 projects supported at EU-level focusing on skills development in the construction sector.
Thank you for your attention!

roman.horvath@ec.europa.eu
Q&A Session

Please be patient while Hélène Sibleau reads your questions to the speakers
Conclusions

Céline Carré
EuroACE Vice-President (Saint-Gobain)
Thank you!