How to upskill building professionals for the energy transition

National approaches

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Barcelona
16th of May, 2019
Challenges
VET Offering
Needs detection
Role of certification
Solutions in progress
Challenges
Challenges

- Legislation
- New workforce
- Market demands

- Reduce greenhouse gas emissions by at least 40% compared to 1990
- Provide at least 27% of renewable energy
- Increase energy efficiency by at least 27%
Challenges. Legislation

European directives

- Directive 2010/31/UE
- Directive (UE) 2018/844

Spanish technical building code

- Energy savings
- Health conditions in buildings
Challenges. Energy objectives

- Reduce greenhouse gas emissions: 40%
- Provide at least 27% of renewable energy: 27%
- Increase energy efficiency by at least 27%: 27%
Challenges. Market demands

Key market demands

- Digitalization
- Energy efficiency
- Circular economy
- Industrialization of the Construction process
Challenges. Market demands

Human capital

- Anticipate skills needs
- Campaigns to attract trainees
- Initiatives in EE
- ICT competencies
- Build up Skills

Let's green construction workers' skills!
Challenges. New workforce

- Average age +45
- Youngsters

- Only 9%
- Women

- 16% in 2018
- TCNs
Challenges. Scenario

Challenges
- Legislation
- Market demands
- Workforce

Factors
- Training needs
- Certification
- VET offering

Projects

Solutions
Qualification in the educational field

PhD, master, Degree

High level VET

Middle level VET

Basic VET

Primary education

Demand of qualification in the labour field
Concern for the lack of bricklayers: “If no youngsters come in, in ten years won’t be any”
Needs detection
Needs detection. Some data

25% - 35%

Bricklayers
Insulation installers
Plumbers
Roofers
COM (2012) 433
Better anticipation of future skills needs!!
Role of certification
- Training on safety and health
- Experience in the construction sector.
- Professional qualification.

+ 770,000 TPCs issued
Certification. What next?

- National certifications
- Replication in other countries
- Mutual recognition
- Cross border certification

Toward a European TPC?
Solutions in progress
Construye 2020+
Blueprint project. Key areas of intervention
Women Can Build / In2C
Solutions. VET Offering

Construye 2020+
Build up Skills Courses
BIM Space
Drag the insulating materials into the wall and see the effects on the waves. Then, decide which one is the best option, the second option, and the worst option for this situation by clicking on the buttons on the left.
App Construye 2020
Energy efficiency
- Concepts
- Consumption
- Legal framework
- Energy certification

Insulation
- Bad practices
- Material reception
- Material stock
- Installation of material

Windows
- Reception
- Installation
- Glazing
- Sealing
- Shutter box

Efficient installations
- Gas individual boilers
- Condensing boilers

Renewable energy
- Energy performance
- Types of RES
Solutions. Needs detection

National Survey of training needs
Construction industry observatory
Blueprint: Big Data Observatory
TPC + Green tag
New project on EU Construction card?
Thank you so much!

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