



EASME

Executive Agency for Small and Medium-sized Enterprises

Research, Innovation and Market Uptake for Energy Efficient Buildings under Horizon 2020:

Example of on-going projects - the BUILD UP Skills Initiative

4th QUALICHeCK conference | EPBD perspectives for compliant and smart buildings
21 February 2017, Brussels

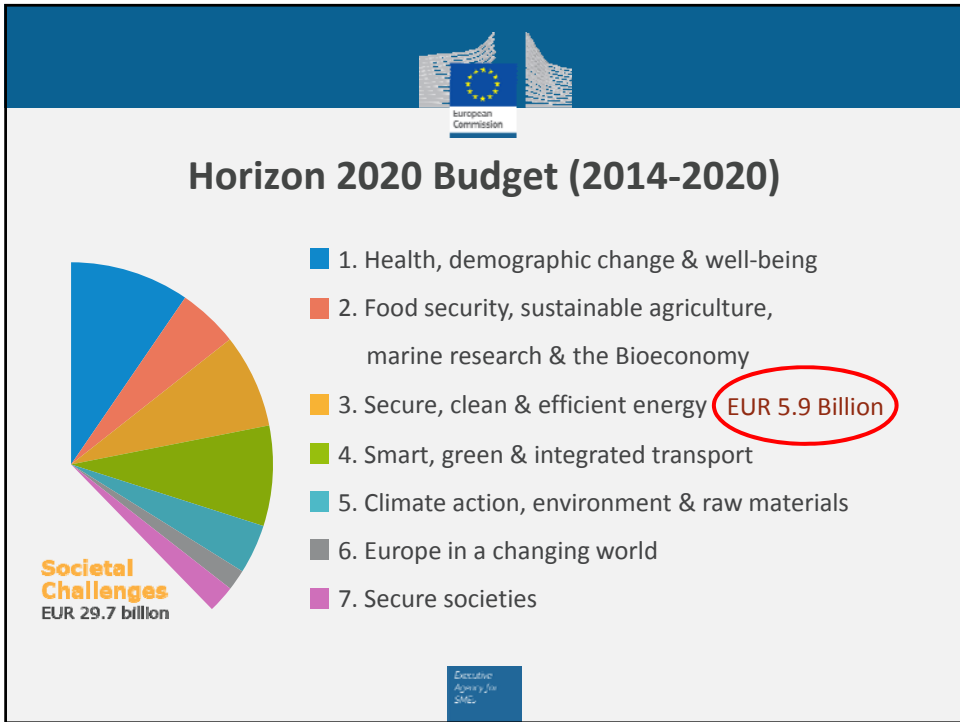
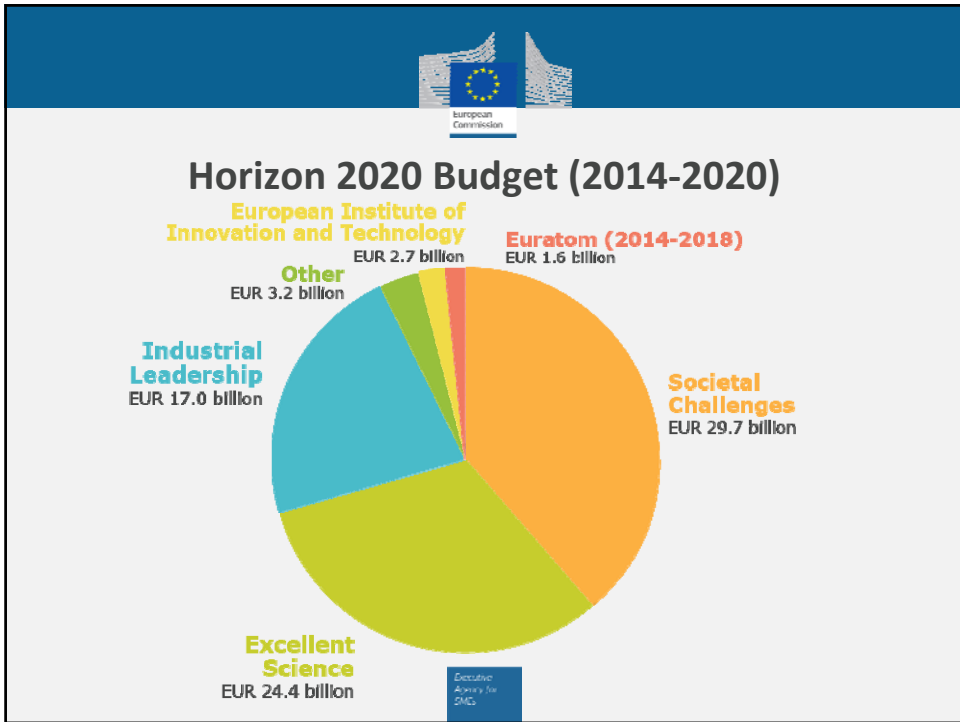
Amandine LACOURT
Project Adviser, EASME



EASME's role within the European Commission

- Manage EU programmes
- Feed project outcomes into EU policymaking







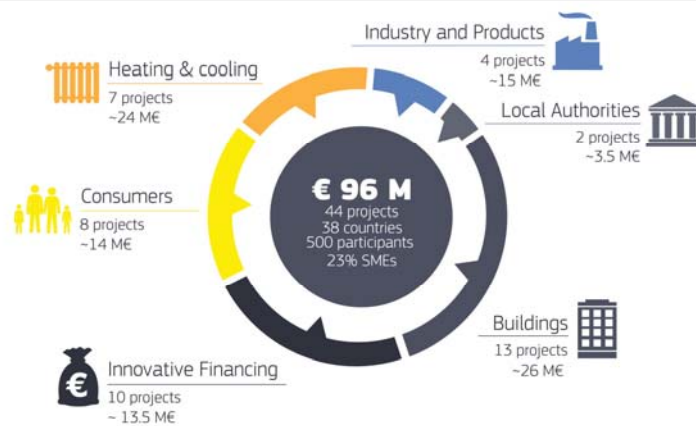
Secure, Clean and Efficient Energy

Main areas	2017, Million EUR
Energy Efficiency	104
Smart Cities and Communities	69
Competitive Low-Carbon Energy	423
SME Instrument	50
ELENA (project dev. assistance)	20
Tenders and other actions	34

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H2020 Energy Efficiency 2016 call results



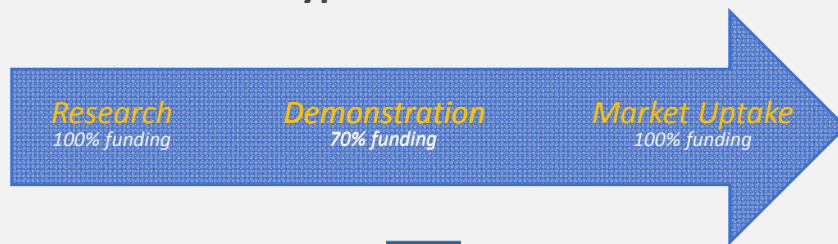
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Secure, Clean and Efficient Energy

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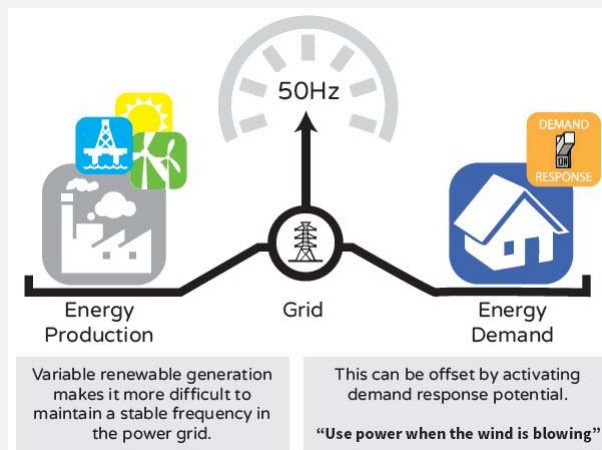
Types of action



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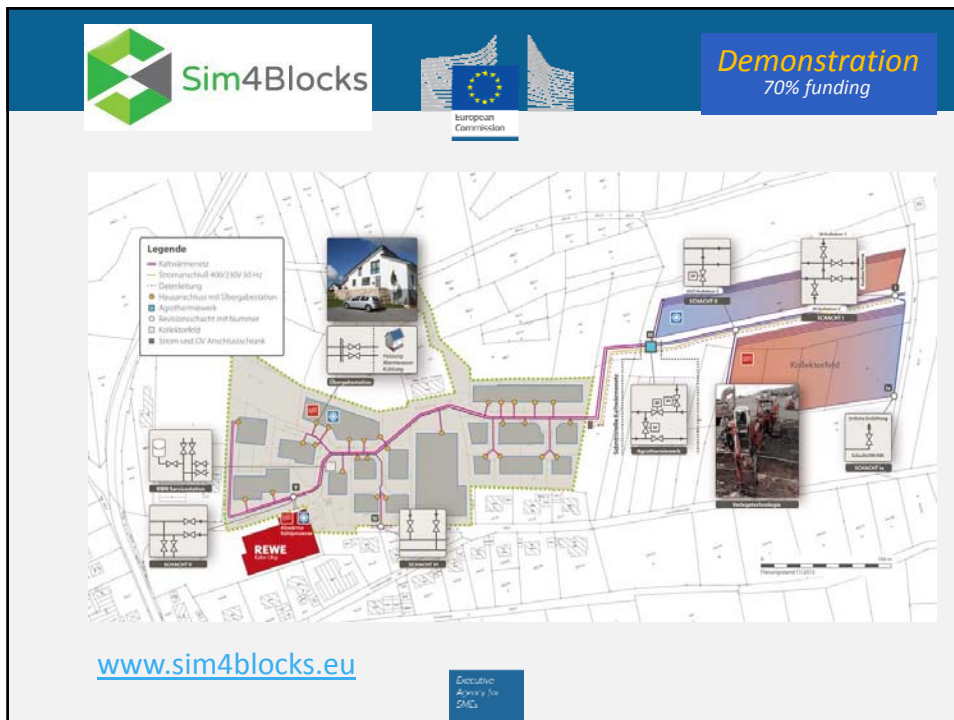


Demonstration
70% funding



www.sim4blocks.eu

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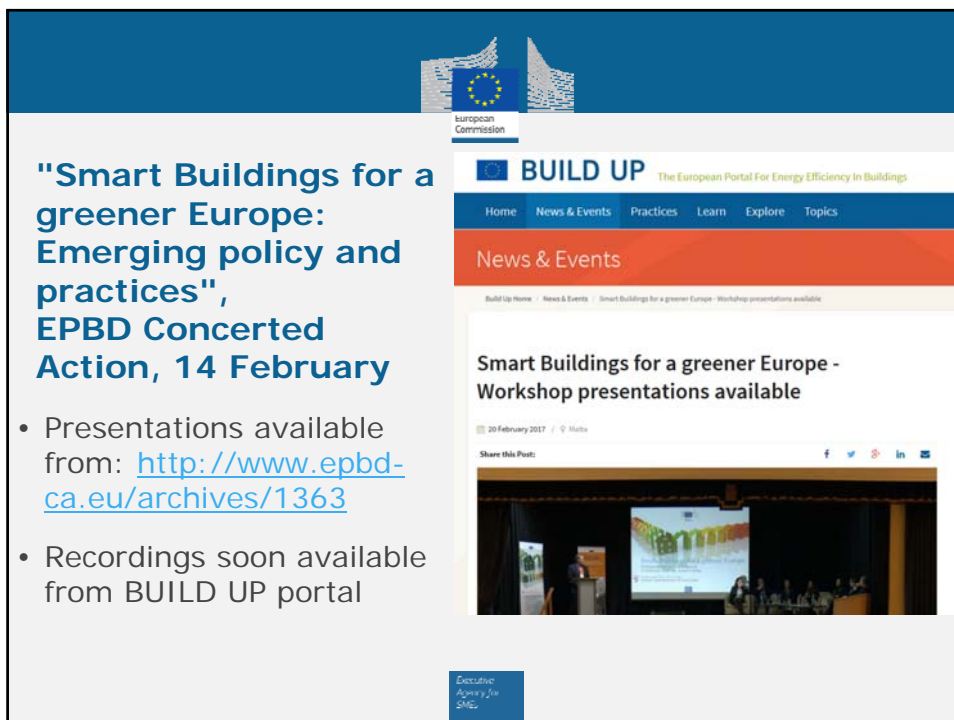
Sim4Blocks European Commission *Demonstration 70% funding*

Legende

- Kollektornetz
- Stromerzeuger (KWK) bzw. Kfz
- Gasleitung
- Hausanschluss mit Übergabestation
- Aggregatenerzeuger
- Hausanschluss mit Kesselraum
- Kollektorfeld
- Strom und DV Anschlusspunkt

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"Smart Buildings for a greener Europe: Emerging policy and practices", EPBD Concerted Action, 14 February

- Presentations available from: <http://www.epbd-ca.eu/archives/1363>
- Recordings soon available from BUILD UP portal

BUILD UP The European Portal For Energy Efficiency In Buildings

Home News & Events Practices Learn Explore Topics

News & Events

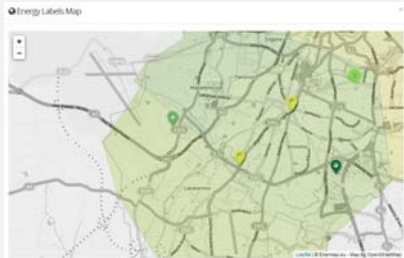
Build Up Home / News & Events / Smart Buildings for a greener Europe - Workshop presentations available

Smart Buildings for a greener Europe - Workshop presentations available

20 February 2017 / 0 Media

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<http://enerfund.eu>

An ENERGY Retrofit FUNDing rating tool to be made available as an interactive map

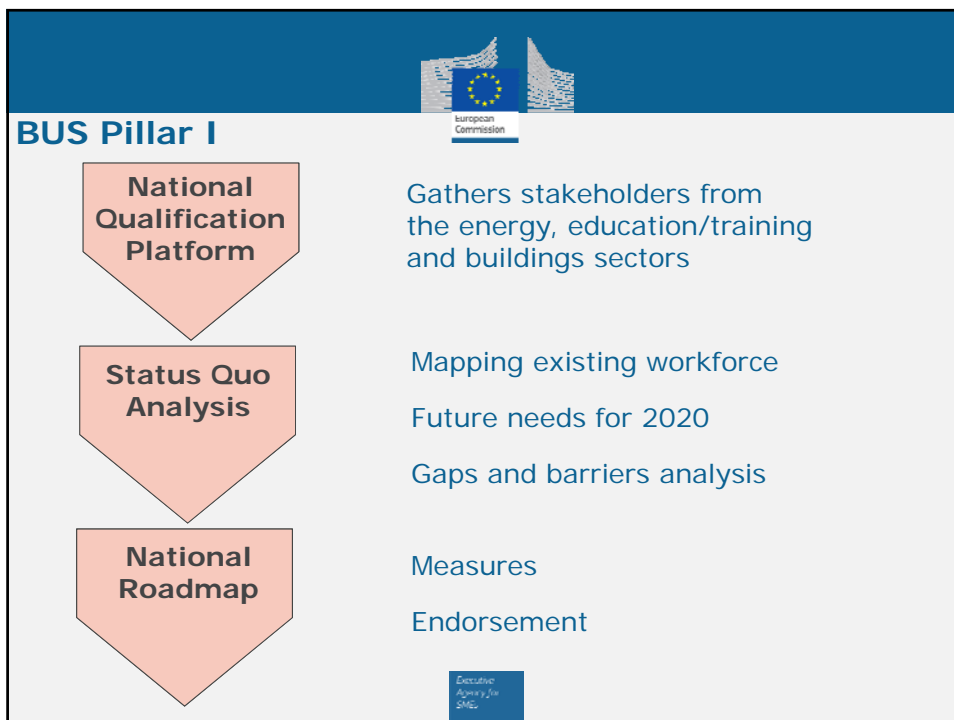
Builds on success of projects funded under the IEE programme: Episcopa, Request2Action, ...

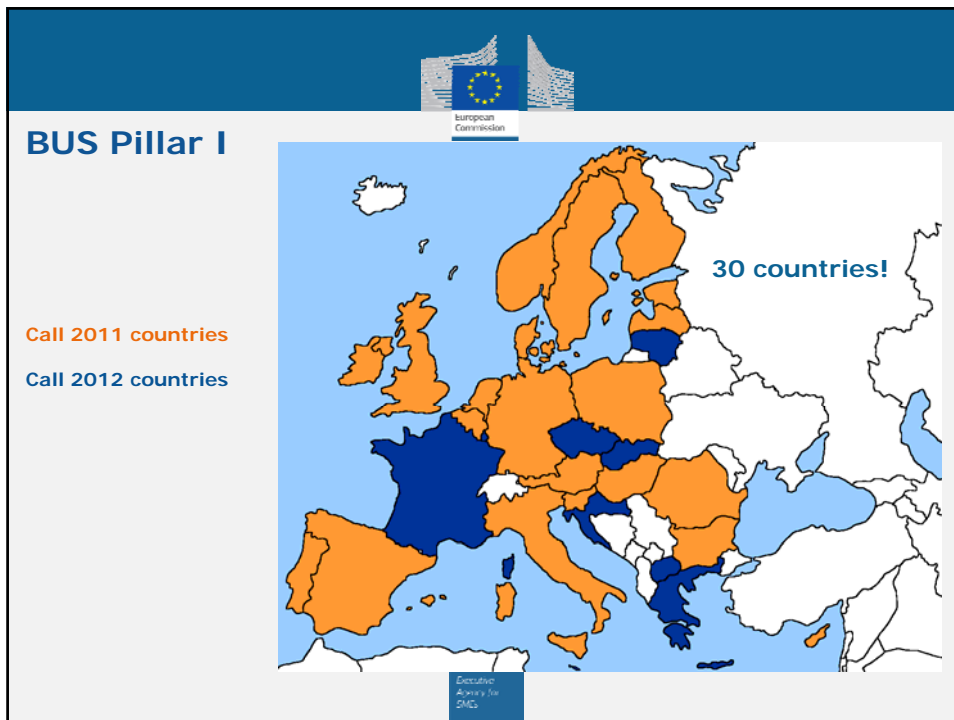
Analysed EPC status and databased in 12 EU countries: AT, BG, CY, DK, ES, FR, EL, IE, RO, SK, SI, UK + 46 past initiatives (projects)

The BUILD UP Skills initiative



Is the workforce ready?





-
- ### BUS Pillar I: main findings
- Slight shortage of building workers by 2020 in most European countries
 - The need for training of the current workforce is much stronger than the estimated need for additional workers
 - More than 3 million workers would require up-skilling on energy efficiency or renewable energy sources by 2020
 - Importance of transferable and cross-trade knowledge and skills
- Executive Agency for SMEs
- The figure is a slide titled 'BUS Pillar I: main findings'. It features a blue header with the European Commission logo and a blue footer with the Executive Agency for SMEs logo. The main content is a list of four bullet points.



BUS Pillar I evaluation – May 2016

- About **1800** people were involved in the initiative
- **84%** of the people surveyed found the initiative very relevant
- First time that stakeholders from the education, energy and construction sectors were meeting at such scale
- Provided a large and unique gap analysis
- **30** National Roadmaps of high quality, with concrete suggestions
- Endorsement of these roadmaps was a key achievement
- Use of BUILD UP Skills findings in other national initiatives (e.g. Austrian National Climate Initiative; Slovakian National Plan for Renovation of Buildings)

http://ec.europa.eu/easme/sites/easme-site/files/bus_evaluation_executive_summary.pdf

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BUS Pillar II - from strategy to action:

- **10** Pillar II projects started in October 2013: AT, CY, DE, EE, ES, FI, IE, LV, NL, RO
- **12** Pillar II projects started in September 2014: BG, EL, HR, HU, IT, LT, LU, MK, PT, SE, SK



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"Construction Skills" under Horizon 2020

- Scope expanded to "white collar" professionals (e.g. designers, architects, engineers, building managers, etc)
- Work Programme 2014-2015: **5** new projects started between March-June 2015
 - **ingREeS**: training of middle and senior level professionals on EE and REs in buildings (CZ, SK)
 - **MEnS** and **PROF/TRAC**: enhancement of skills for engineers and architects to build nZEB
 - **Train-to-NZEB**: set up and upgrade of training curricula for trainers, construction workers, designers and others based on the Passive House concept
 - **BUStoB**: creation and update of qualification and training schemes for EQF4, craftsmen and other on-site workers in The Netherlands

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Outlook

- 2016 World Economic Forum report *"Shaping the Future of Construction: A Breakthrough in Mindset and Technology"* → BUILD UP Skills as best practice
- The EU Strategy on Heating & Cooling (February 2016) recommends to extend the work of BUILD UP Skills to other construction professionals
- The Pillar I evaluation recommends to keep developing synergies with other EU programmes
- Support to be provided under the H2020 Energy Efficiency Calls
- The "Clean Energy for All Europeans" Package stresses the need to upskill the building workforce

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EE14-2017: Construction Skills

- Support for upgrading or setting up training schemes for professionals of the building value chain
- New challenges e.g. BIM, RES integration, new products and processes
- Proposals between 0.5 and 1 million EUR (does not preclude submission and selection of proposals requesting other amounts)
- Type of Action: Coordination & Support Action
- Deadline: **7 June 2017**

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Examples of successful BUS projects:

Construye2020 (Spain)

<http://construye2020.eu>

- Design and implement **9 training actions**
- Training simulator: **app for mobile devices** showing good practices for the different steps in renovation
- **Pilot courses** involving **430 workers**
- **Outreach campaign in 15 major Spanish cities** + national media campaign → estimated impact **12 million people**



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BUILD UP Skills BEEP (Finland)

<http://www.motiva.fi/buildupskillsfinland>

Innovative training toolbox including:

- sets of **slides** and didactic **videos** in 5 languages (FI, SE, EST, RU, EN)
- **instruction cards** for workers self-learning
- pilot training for **'change agents'** (experienced workers/mentors)
- **Training Ambassador:** helping to attract workers and companies

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1 - INSULATING A WOODEN WALL WITH MINERAL WOOL

- 1. Required tools and protective equipment:**
 - Tools: hammer, saw, utility knife, gloves, safety glasses.
 - Instructions: always use correct safety procedures.
- 2. The wind shield board is attached to the building frame before installing the thermal insulation. The same must be taped over with suitable tape. If required, seam strength can be reinforced with buttons.**
- 3. The insulation sheet is cut about 15 mm larger than the installation slot:**
 - Instructions: The sheets are cut with a saw blade or must use an electric, smooth cutting knife.
- 4. Mounting the sheet:**
 - Instructions: The insulator must be placed firmly against the background and the other sheet on top of it. Only use dry insulation. Air pocket formation during the mounting phase can be avoided by fitting the wind shield.
- 5. All possible gaps must be packed with soft insulant. Foam must not be used.**
- 6. In the corner sections of the building, the upper beam can be mounted immediately behind the surface insulation. This will prevent vapour from condensing on to the surface of the upper beam.**
 - Instructions: The corner of the building are colder, also increasing the risk of condensation. A vapour barrier that is based near to the rear surface decreases the risk of condensing.

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BUILD UP Skills SWEBUILD

<http://energibyggare.se/>

E-learning platform with six interactive modules:

- introduction
- the building as a system
- thermal insulation
- air tightness
- moisture issues
- installation of technical building systems

Varför ska vi bygga energieffektivt?

Vi bygger för att skapa goda, hälsosamma och trygga miljöer där vi kan bo och verka. Inomhusmiljön är viktig.

Ut ett miljö- och hälsoperspektiv är det dessutom viktigt att vi har en hög energianvändning och trygga klimatförhållanden för framtida generationer. Det går att bygga energieffektiva bostäder och byggnader och renovering utan att kompromissa med komforten.

De val du gör när du bygger och installerar påverkar inte bara den specifika byggnadens kvalitet - de har också betydelse i ett större sammanhang.

- **Utsäddningsplan**
- **Utsäddningsplan**
- **Utsäddningsplan**

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- combination of didactic texts (with voice-over) and interactive drawings
- to be used individually by workers (at home/on-site) or used during group training courses
- all modules can be followed within 4 hours
- self-assessment test at the end of each module



European Commission

BUILD UP Skills QualiBuild (Ireland)

www.qualibuild.ie/

- Irish construction worker skills register. Qualified workers can advertise their skills, the public can search for them
- 59 trainers trained, 195 workers trained and certified in pilots
- National programme for roll-out
- Effective communication via variety of channels: YouTube, slideshare, Twitter, radio shows, pub conversations...



train, register, promote, search

Register Login

The Construction Worker Skills Register encourages engagement in training and skills development within the building sector.

To register, construction workers must complete a QualiBuild Foundation Energy Skills training or QualiBuild Train the Trainer training.

The public or potential employers can search the register and view training records before hiring a construction worker.

Search the Register



SEARCH

Join the Register



REGISTER




Brought to you courtesy of
United to the support Energy EU
 Programme of the European Union



BUILD UP SKILLS
ENERGY TRAINING FOR BUILDERS



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European Commission

PROF-TRAC

www.profrac.eu

- Skills gaps have been mapped across Europe, using BUILD UP Skills methodology
- New European Open Training and Qualification Platform for NZEB – over 100,000 entries: case studies, lecture notes, MOOCs, video tutorials, workshops
- European Train the Trainers programme. Trained people can use the platform to design and deliver their own courses across EU



PROF / TRAC TEAM TRAINING PROVIDERS TRAINERS AREA TRAINING MATERIAL REPOSITORY

TRAINING MATERIAL REPOSITORY

On this page you can find all relevant training materials on NZEB. Use the filter form on the left to narrow the results.

Filter:

Year:


Type of project:

Building type:

Type of material:

Language:

Assessment report	Topic	Pages	
The Carbon Footprint Measurements And Analysis Of The Indoor Environment And Energy Consumption In 8 Passive Houses (2009-2012)	Energy reduction	239	View details
Energoaudit Begger - Definition framtidige bygninger	Energy management	218	View details
Energoaudit Begger - Designprincipper bygninger eksempel for enfamiliehuse	Energy management	218	View details
Energoaudit Begger - Tekniske løsninger	Energy management	218	View details
Zero Energy Buildings - DESIGN PRINCIPLES AND BEST EXAMPLES	Energy management	218	View details
Survey Findings Report	Assessment of energy performance	166	View details



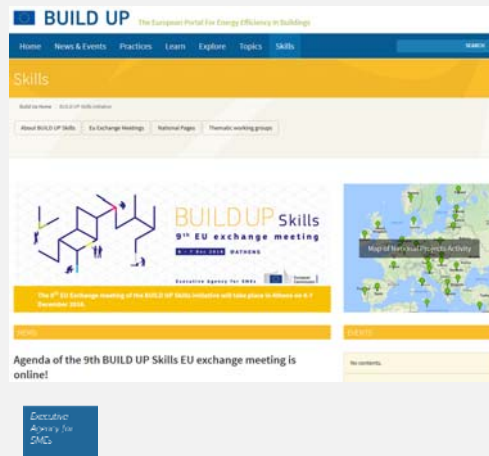
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BUILD UP – the EU portal for energy efficiency in buildings

www.buildup.eu

- Latest news, research, live webinars, data tools
- Upload material, collaborate
- Follow on LinkedIn
- Now in 7 major EU languages
- Integration of BUILD UP Skills



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**THANK YOU
FOR YOUR ATTENTION**

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