



NEWCOM

New qualification schemes
to build high quality

A way to needed & transparent nZEB competences for professionals



Foto: © EMI



Foto: © TNO



Foto: © J. Pichler GmbH

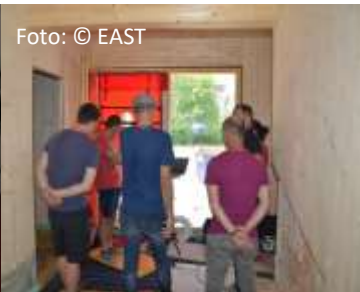


Foto: © EAST



Foto: © TNO

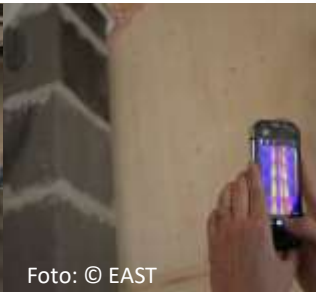


Foto: © EAST

BUILD UP Skills Initiative

Process in Austria

NEWCOM New qualification schemes
to build high quality

Development and
implementation of
new trainings

Endorsed national
roadmap

National qualification-
platform

Working paper

Status quo report



Set up large-scale
**qualification
schemes** to
implement missing
qualifications for
**building
professionals**. Focus
on the possibility of
mutual recognition
between member
states.

BUILD UP Skills Austria (11/11 – 05/13)

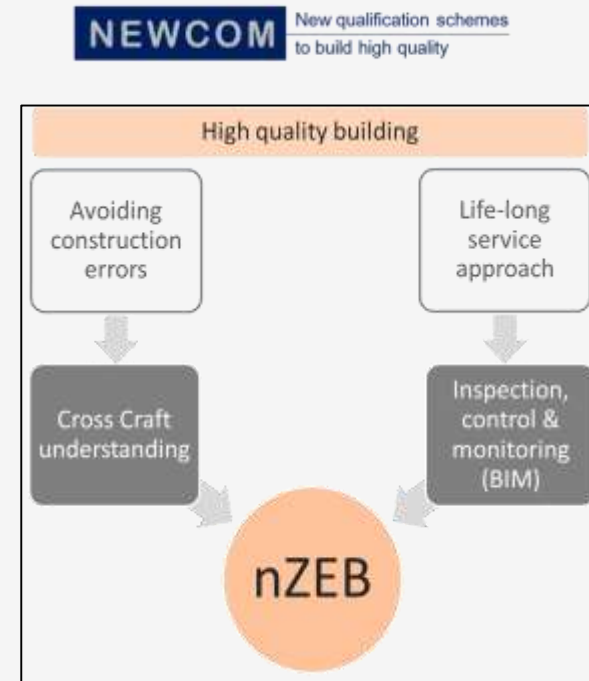
BUILD UP Skills CrossCraft
(11/13 – 06/16)

NEWCOM (09/17 – 11/20)

NEWCOM

Main project activities

- **Development of needed qualification schemes for building professionals.**
- **Implementation** of respective “train the trainer” trainings in the participating countries.
- **Preparation of mutual recognition** of the developed qualification schemes **between partner countries.**
- **Development of strategies to raise the market demand** for the developed qualification schemes to **guarantee** the **sustainability** beyond the project lifespan as well as the **replication** across the EU.



By “NEWCOM” the number of blue collar workers with special nZEB competence is increased, the quality of buildings (focus energy efficiency) raised and the market recognition of well-skilled professionals across the building sector in the European market boosted.

Current barriers

Current barriers to the **construction of high quality** (highly efficient) **buildings** (new buildings and renovations):

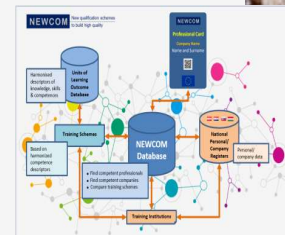
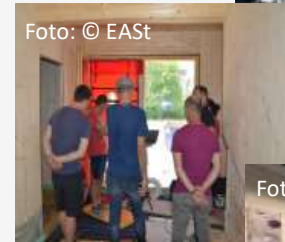
- **Insufficient quality assurance** (in the field of energy efficiency) in construction.
- **Lack of interest** on the part of **construction companies** in **increasing the competence of their employees**.
- **Lack of interest of professionals** in **further training**.
- **Lack of demand from building owners** for **sustainable and energy-efficient buildings**.
- **Declining demand for personal certification** (according to ISO 17024) in the field of building services engineering and the passive house standard.
- At present, there are **hardly any offers for cross-craft further training courses** throughout the EU.
- **Cooperation between different trades** is becoming **increasingly rare** in the building sector.



NEWCOM

Main Results

1. Development of **new training schemes with clear competence descriptions** on the base of units of learning outcomes (ULO) for
 - **Flat roofing** and waterproofing
 - **Comfort ventilation**
2. **Implementation of respective „Train the Trainer“ trainings** in the partner countries.
3. **Development of the NEWCOM competence database** for the Europe-wide comparability of acquired skills.



NEWCOM

New training modules

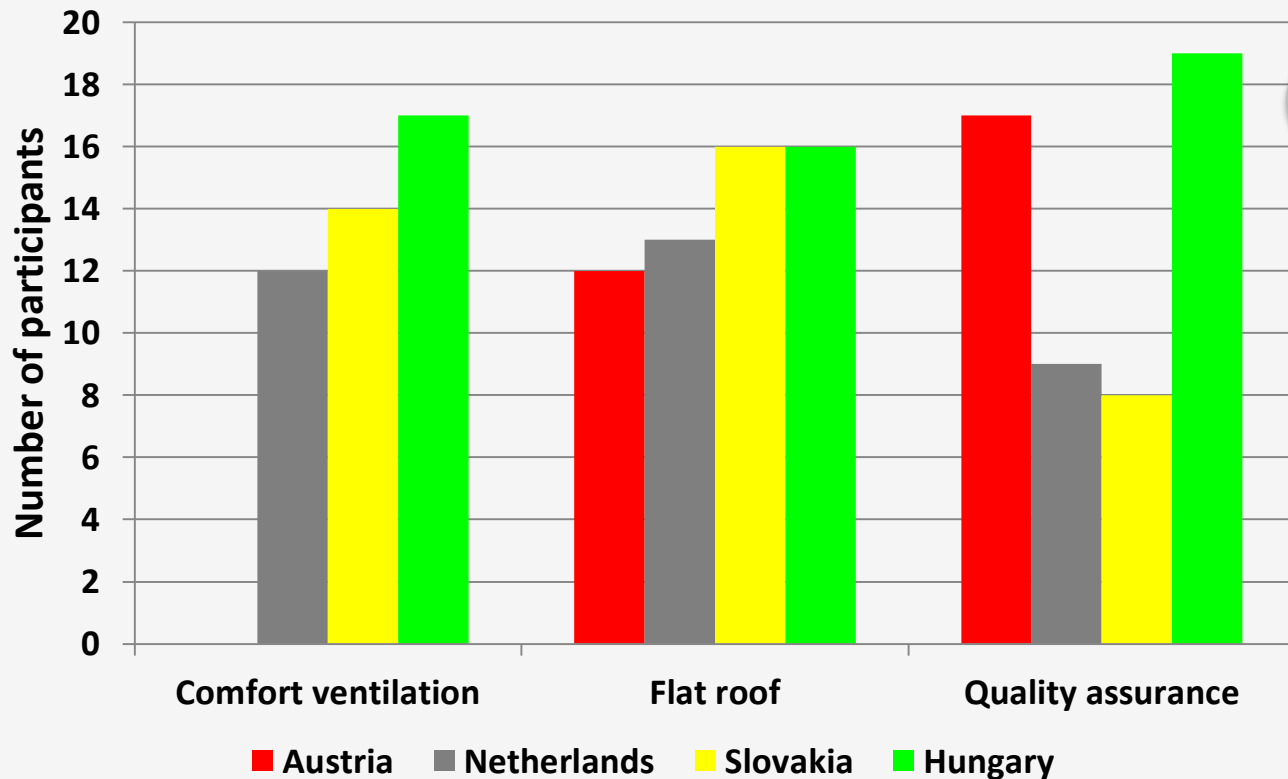
- **Flat roofing and waterproofing** – acquisition of competences with respect to a “lifelong service approach” such as correct planning and installing of green roofs and renewable energy systems on the roof, avoiding of humidity in the structure of the roof, implementing of energy efficiency measures on the roof as well as further nZEB features.
- **Comfort ventilation installation** – acquisition of competences regarding correct planning and installing of ventilation systems with heat recovery, noise protection and controlled air flow distribution as well as smart demand controlled systems.
- **Quality assurance** – acquisition of competences in terms of managing of cross-craft interfaces, ensuring of indoor air quality, quality of thermal building envelop and energy system, optimizing of the building as to energy use and ecology, and evaluating of the cost-optimal measures in view of the life cycle of the building.



NEWCOM

Implementation of „Train the Trainer“ trainings

NEWCOM New qualification schemes
to build high quality



153
Participants

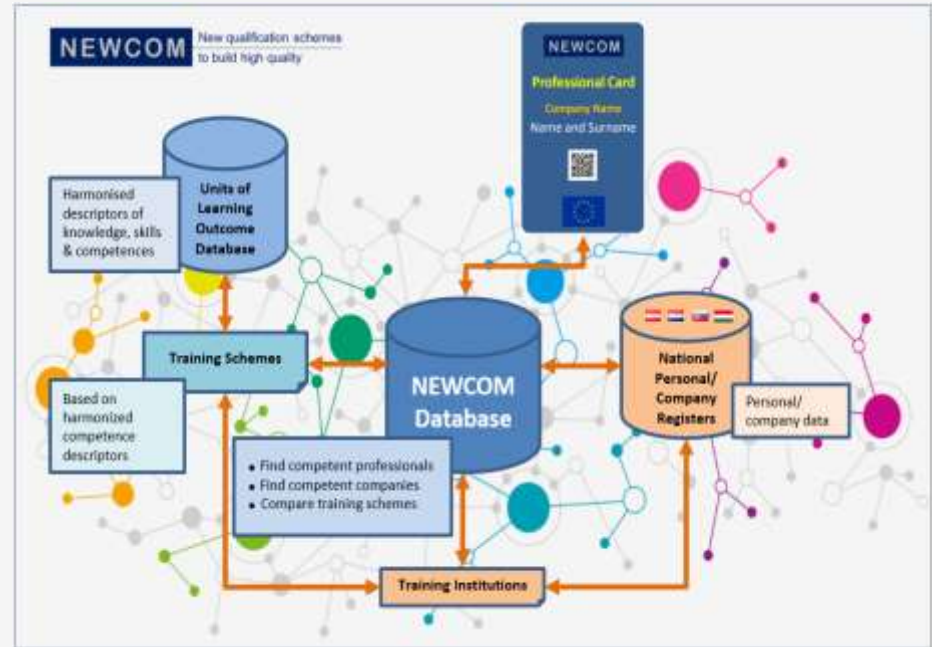


NEWCOM

Competence database

- Aim is a Europe-wide comparability of acquired skills.
- Competence database links the skills acquired by further education to the professional.
- A professional card can be issued on base of the acquired skills.

NEWCOM New qualification schemes
to build high quality



The **NEWCOM** competence database can be expanded to nearly every field of work and could be used throughout Europe.

Functions

Competence database

-
1. **Linking of the acquired skills to the professional.**
 2. **Presentation of acquired skills in a validated format** (professional card).
 3. **Clear competence descriptions** on the base of units of learning outcomes (ULOs).
 4. **Comparability of content** of different trainings/training modules.
 5. Possibility to **search for professionals with specific competences.**
-

Functions

Competence database

-
- 1. Linking of the acquired skills to the professional.**
 - 2. Presentation of acquired skills in a validated format (professional card).**
 3. Clear competence descriptions on the base of units of learning outcomes (ULOs).
 4. Comparability of content of different trainings/training modules.
 5. Possibility to search for professionals with specific competences.
-

BUILD UP Skills advisor app & NEWCOM competence database

- The **BUILD UP Skills advisor app** was developed with support from Europe's **Horizon 2020 programme** and first released in **2015**. The **purpose** of the BUILD UP Skills advisor app is **to provide construction workers with job-specific advices and short upskilling opportunities**.
- By the linkage of the **NEWCOM competence database** to the **BUILD UP Skills advisor app** a **proven user interface** is used for the **presentation of acquired skills** in combination with further education trainings.

NEWCOM New qualification schemes
to build high quality



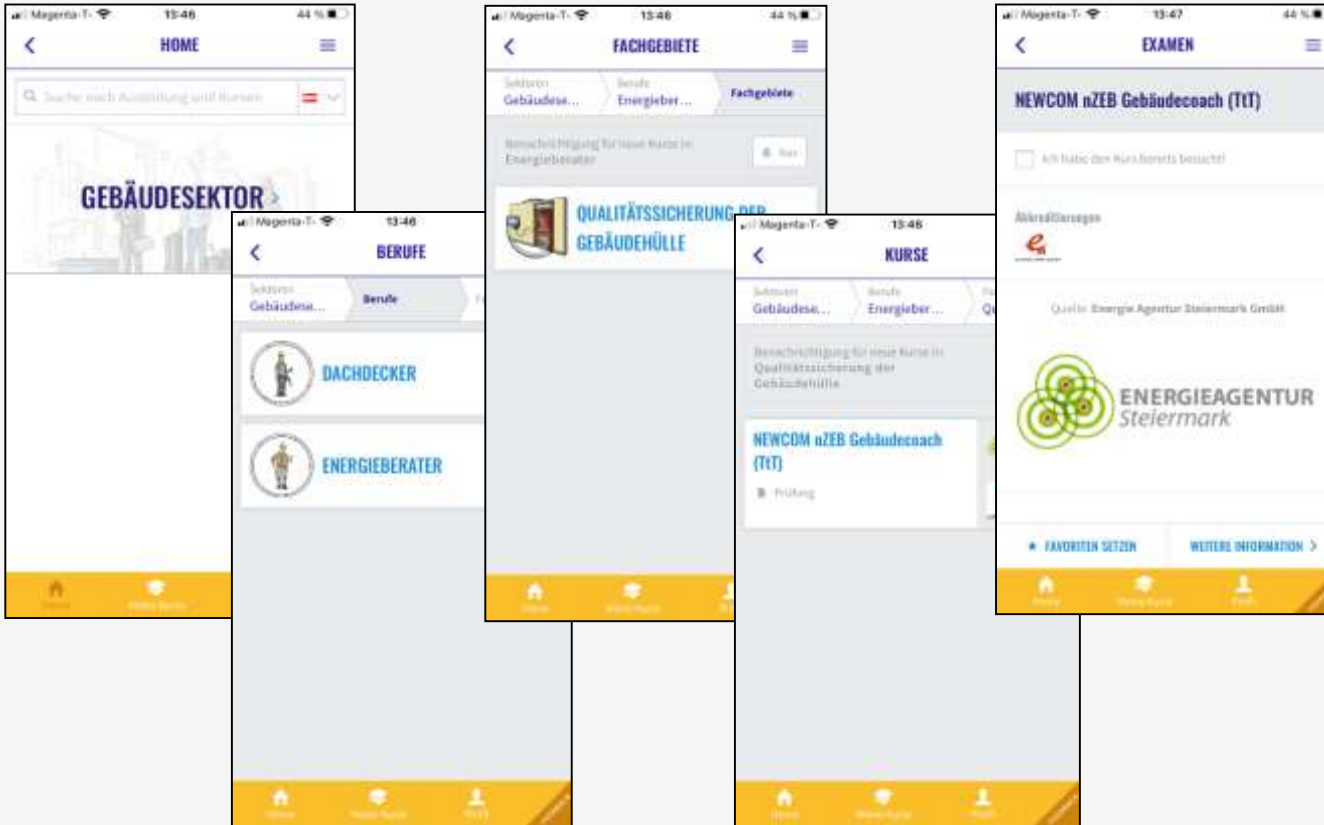
<https://ec.europa.eu/easme/en/news/mobile-app-skills-construction>

BUILD UP Skills advisor app

National pilot version (Austria)

NEWCOM

New qualification schemes
to build high quality



Functions

Competence database

-
1. Linking of the acquired skills to the professional.
 2. Presentation of acquired skills in a validated format (professional card).
 3. **Clear competence descriptions** on the base of units of learning outcomes (ULOs).
 4. **Comparability of content** of different trainings/training modules.
 5. Possibility to **search for professionals with specific competences.**
-

Harmonized competence description

NEWCOM

New qualification schemes
to build high quality

Clear description of training content on basis of ULOs

- **To enable** the international **comparability of trainings** the **content** of training modules **has to be created on the basis of units of learning outcomes**.
- The **database** offers a flexible methodology that **allows the definition of professional activities, related skills, and required competences** in the field of the construction of nZEBs.
- It is **composed out of tasks and related subtasks that have to be performed on a certain time in a process** and by (a) certain person(s) with a certain skillset.
- On base of this methodology the **NEWCOM project developed specific ULOs for the description of competences going together with the new developed training schemes**.



Compare function

Compare content of trainings/qualifications

Because the trainings, training modules and qualifications of the NEWCOM competence database rest upon harmonized competence descriptions an international comparability of trainings gets enabled. These competence descriptions can be viewed and compared by the database users.

Name	Aktualisiert	Zuletzt aktualisiert von	# Aufgaben	# Veröffentlichungen	Export
NEWCOM nZEB ventilation	2020-03-19 11:35	admin	23	0	
NEWCOM nZEB Roofer	2019-10-23 16:38	admin	33	2	
Multifunctional Roofs and Facades	2019-05-23 15:08	j.cromwijk@tisso.nl	1	0	
NEWCOM Building Inspector	2019-03-				
nZEB ventilation	2019-02-				

[QS_nZEBBuildingInspectorAustria_2020-11-03_14_08_36.xlsx](#)

Name	Erstellt	Zuletzt aktualisiert von	Export	Löschen
NEWCOM Building Inspector	2020-02-06 14:40	j.cromwijk@otib.nl		
nZEB Building Inspector Austria	2020-10-28 08:39	georg.trnka@energyagency.at		

Search function

Search for professionals with specific competences

As soon as a **professional has proved his competences in connection to a training or qualification the professional can be found by companies and end users.**



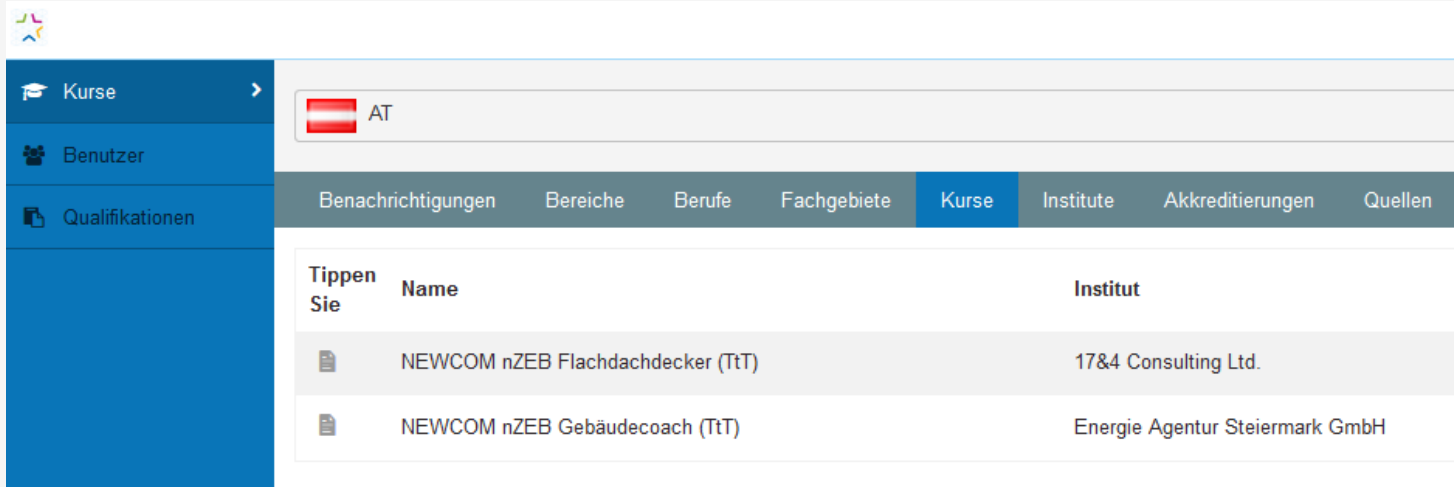
The professional can show his/her new competences convincingly on the labour market.

NEWCOM competence database



National pilot versions online

NEWCOM

New qualification schemes
to build high quality



The screenshot shows the NEWCOM competence database interface. On the left is a blue navigation menu with three items: 'Kurse' (Courses), 'Benutzer' (Users), and 'Qualifikationen' (Qualifications). The 'Kurse' item is selected and has a right-pointing arrow. The main content area has a header with a search bar containing 'AT' (Austria) and a tabbed navigation bar with the following tabs: 'Benachrichtigungen', 'Bereiche', 'Berufe', 'Fachgebiete', 'Kurse' (selected), 'Institute', 'Akkreditierungen', and 'Quellen'. Below the tabs is a table with the following data:

Tippen Sie	Name	Institut
	NEWCOM nZEB Flachdachdecker (TtT)	17&4 Consulting Ltd.
	NEWCOM nZEB Gebäudecoach (TtT)	Energie Agentur Steiermark GmbH

<https://api.buildupskillsadvisor.eu/login/auth>

Benefits

Competence database

- **Building professionals can link their earned qualification to their profile in the NEWCOM competence database and produce an individual professional pass showing their competences. This enables building professionals to present their skills on the job market in a comprehensible manner.**
- **Developed further educations based on the harmonized competence descriptors enables company owners to clearly identify the up-skilling of their employees according to the new training courses.**
- **To ensure a high implementation quality on the construction site , specific requirements for the qualification of the workforce can be proven by using the NEWCOM competence database.**
- **The competence of companies who employ skilled professionals is be made visible by the NEWCOM competence database for quality-oriented costumers.**



NEWCOM

Disseminations activities

- National und international **project websites**
- National und international **workshops and events**
- **Publications**, newsletters...
- **Flyers**, Post cards, **rollups**
- **Give aways** (measuring tapes, Polo-shirts...)

Further information on the project:

www.newcomtraining.com



Foto: © EAST

Project consortium

Coordinator

- Austrian Energy Agency – Austria

Partners

- Energy Agency Styria – Austria
- 17&4 Consulting Ltd. – Austria
- ÉMI Non-profit Limited Liability Company for Quality Control and Innovation in Building – Hungary
- ViaEuropa Competence Centre – Slovakia
- Innovation for life – The Netherlands
- Dutch Knowledge Centre for the building and building services sector – The Netherlands



Contact

Georg Trnka

Senior Expert Buildings

Austrian Energy Agency

georg.trnka@energyagency.at

Tel +43 (0)1 586 15 24 - 173

Mariahilfer Strasse 136 | 1150 Vienna | Austria

www.energyagency.at



AUSTRIAN ENERGY AGENCY

NEWCOM

New qualification schemes
to build high quality



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 754148



The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

Interactive part

Questions to audience

1. What are your experiences with the description and harmonization of competences (units of learning outcomes)?
2. Would it be necessary to describe all occupations by ULOs or would it be sufficient to describe only qualifications according to the further education of already skilled workers?
3. What are your experiences with national or European databases for personal recognition of skills/competences?
4. Does an increased personal recognition of skills of building professionals has automatically a stimulating effect on the market demand on highly energy efficient buildings?

