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15th BUILD UP Skills European exchange meeting, 26-27/10/2023

SESSION 2A: How to design a robust and market-ready qualification framework

SEEtheSkills e-tools for recognition of skills

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SEE*the*Skills

Sustainable EnErgy Skills in construction: Visible, Validated, Valuable

Project partners

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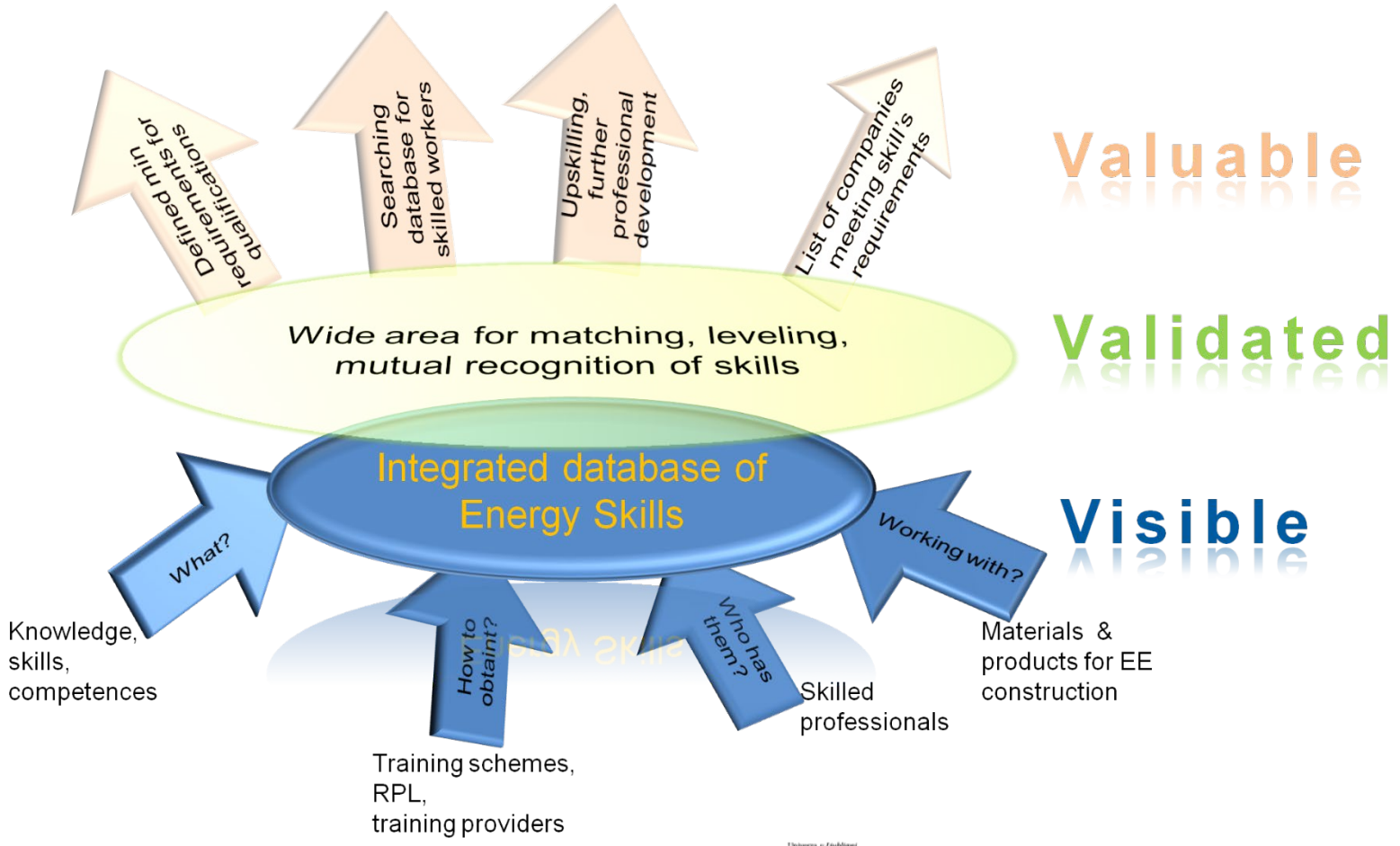
SEEtheSkills 3V approach for raising the value of energy skills

Concept and approach

Creation of Integrated database of Energy skills to serve as a wide area for matching, leveling and mutual recognition of skills



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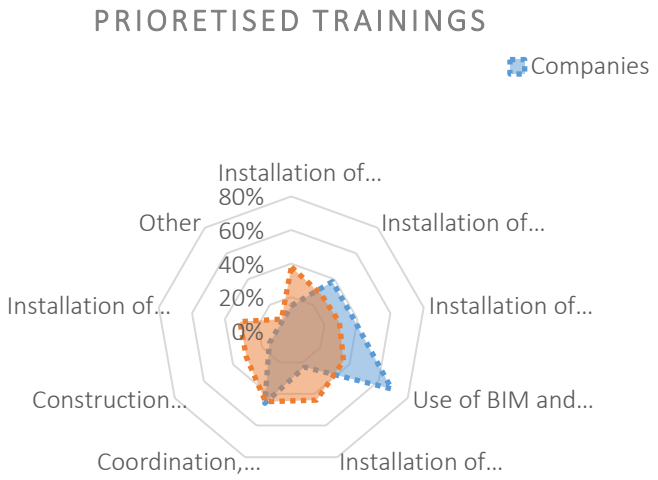
Main findings and best practices in the field of energy skills on EU level

1. EU survey on the status of EE skills

- Lack of registers of skilled person – the need for VISIBILITY
- Less than 25 % of respondents have some form of published (announced, visible) information about their EE skills
- **Only 30 % of respondents have formal documents that certify their skills**
- A share of 82% of the respondents have declared that have achieved their skills through the trainings organized by professional organisations
- Crucial actions are needed to increase the AWARENESS of the VALUE of skills
- When lacking EE and digital skills
  - -Only 33% will reskills existing employed workers
  - -Only 11% will redeploy existing workforce
  - -More than 50 % will hire external experts (skilled professionals)



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Two different approaches for skills' VALIDATION

- **e-learning platform**, that will include the following e-trainings in form of webinars created by project partners:
  - -2 webinars on RES qualification
  - -2 webinars on BIM qualifications for blue collars
  - -2 webinars on BIM qualifications for white collars
  - -2 webinars on cross-craft skills qualifications

- **Creation of e-RPL tool**. The process of recognition of previous learning RPL, based on defined steps of identification, documentation, evaluation and certification adjusted as on-line process, including:
  - communication to identify the necessary skills
  - submitting documentation for evaluation
  - evaluation of submitted documents and
  - issuing certification

realized through web-based platform for e-learning. Besides the necessary documents to be filled by the applicants, the tool will include guidelines for explaining the process to ensure successful applications.

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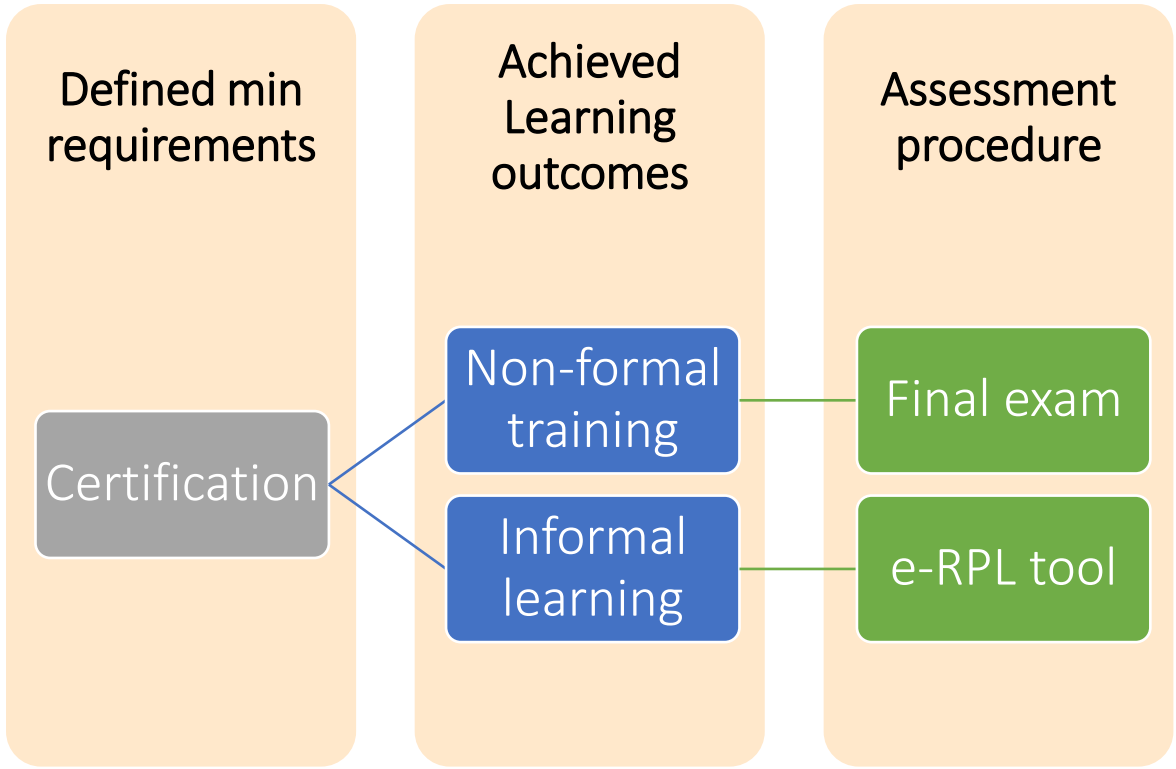
Certification available within the **Integrated Register of Energy skills**



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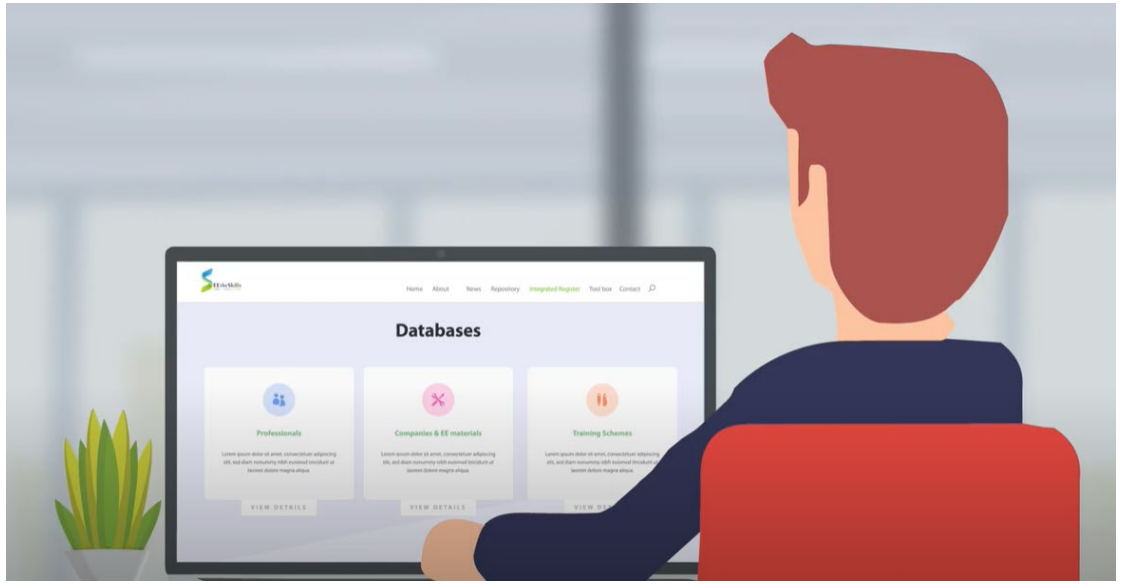
The utmost project result - toward the VISIBILITY of skills

Integrated Register of energy skills

Single spot for everything related to energy skills

- 👉Training schemes
- 👉Certified professionals
- 👉Construction materials



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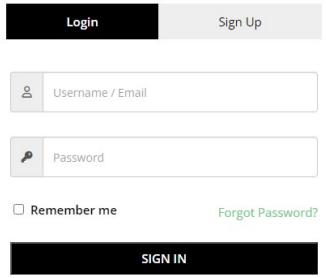
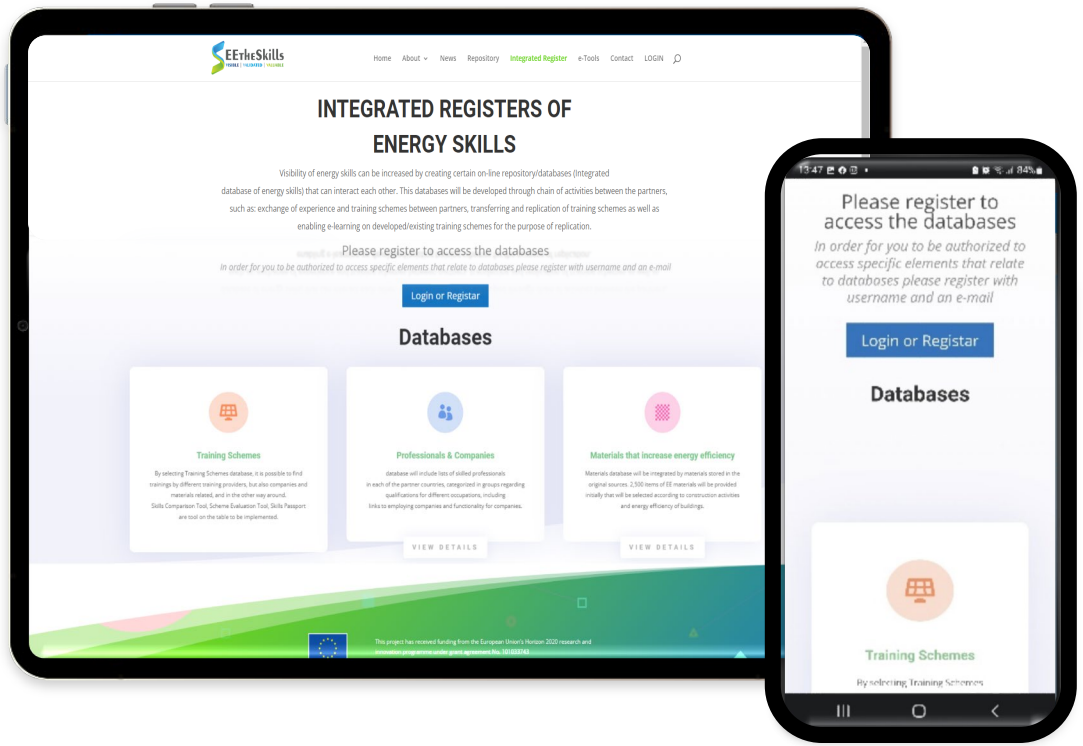
Launching the Integrated Register of Energy skills as user-friendly web-based application available in desktop and mobile version

The Integrated Register of Energy skills is available for access to all interested professionals and companies, through the website www.seetheskills.eu.

It can be easily accessed through desktop or mobile device.



Registration form



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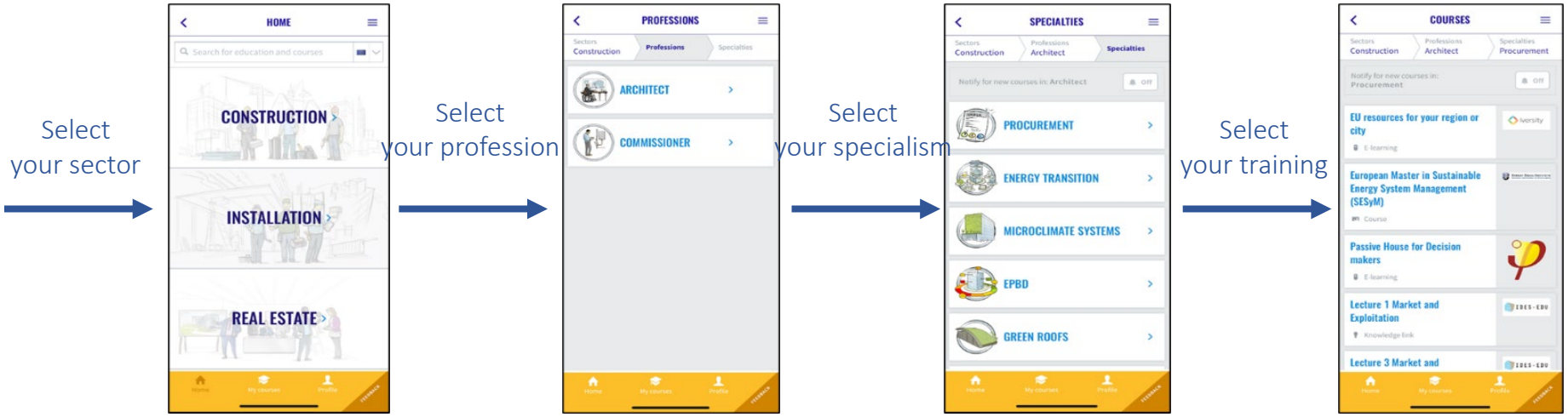
Catalogue of training schemes within the Integrated Register of Energy skills

The catalogue of training schemes is the well recognized on EU level application: **BUILD UP Skills Advisor** that aims to equip and advise the next generation of construction and installation sector workers with the knowledge and energy skills necessary to secure construction and renovation projects by digital technology. With the app, you can get good insights and update their knowledge and skills on topics such as energy savings and sustainable energy generation.



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Professionals' register within the Integrated Register of Energy skills

Digital Register of certified workers and trainers

Boosting market acceptance of skilled professionals in construction will enable harvesting direct benefits from the skills for building professionals and on-site workers, and consequently the recognition of their market value.

To achieve the visibility and to enable promotion of certified workers and professionals, Digital Register of certified workers and trainers is created.

The Professionals listed in the **Professionals' register** will receive a Digital badge that will include each skills, knowledge and competence that a worker has ever gained, it will contain an information on the education of the worker in formal and non-formal form with the list of trainings, and moreover this personal skills' passport will have levelled all the achieved learning outcomes.

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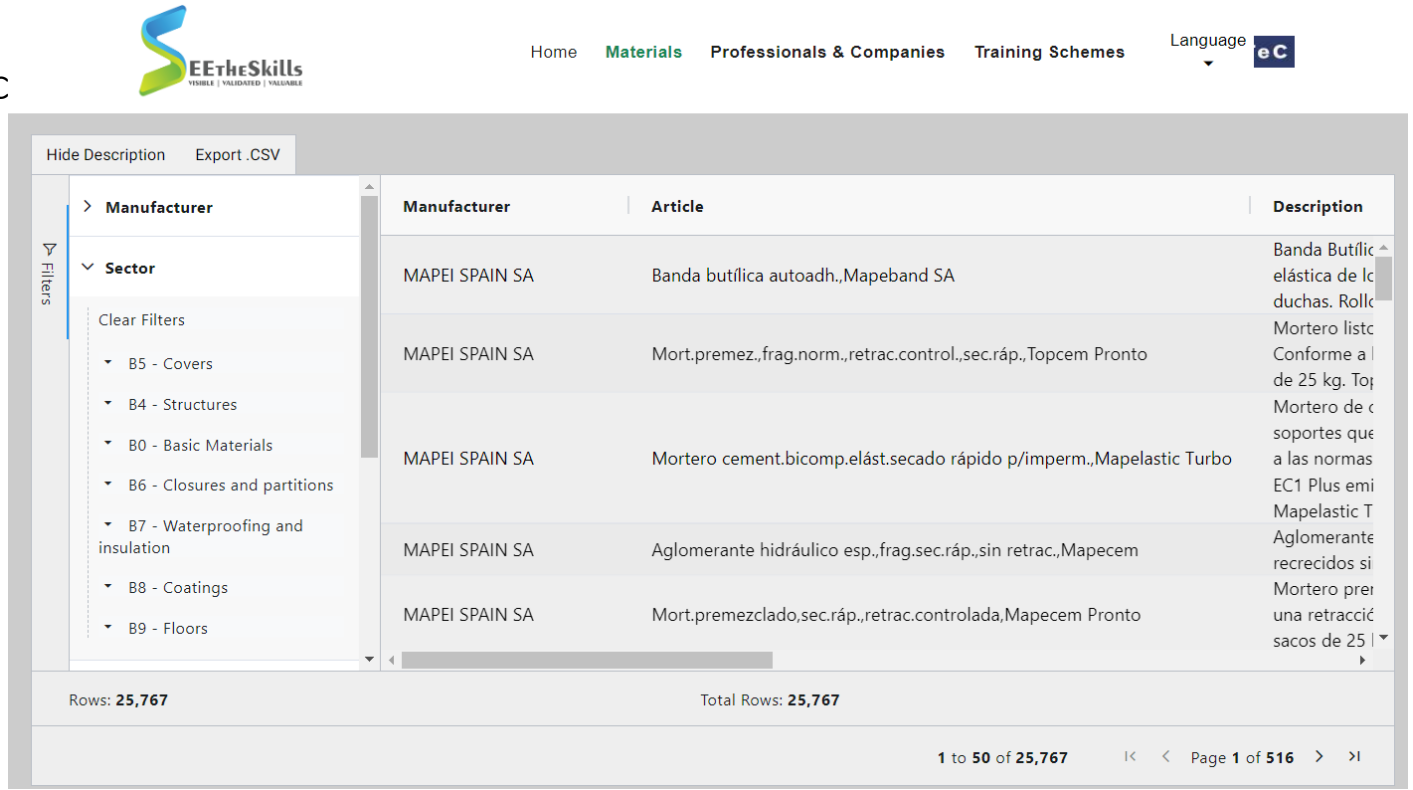
Database of Construction Materials within the Integrated Register of Energy skills

SEEtheSkills Materials Database provides economic and environmental information regarding construction elements used in Efficient Energy actions in the construction market.

It brings a technical, environmental and economic information regarding all kind of elements used in each phase of construction, including the level of their greenness and listed necessary skills to be incorporated in the buildings.



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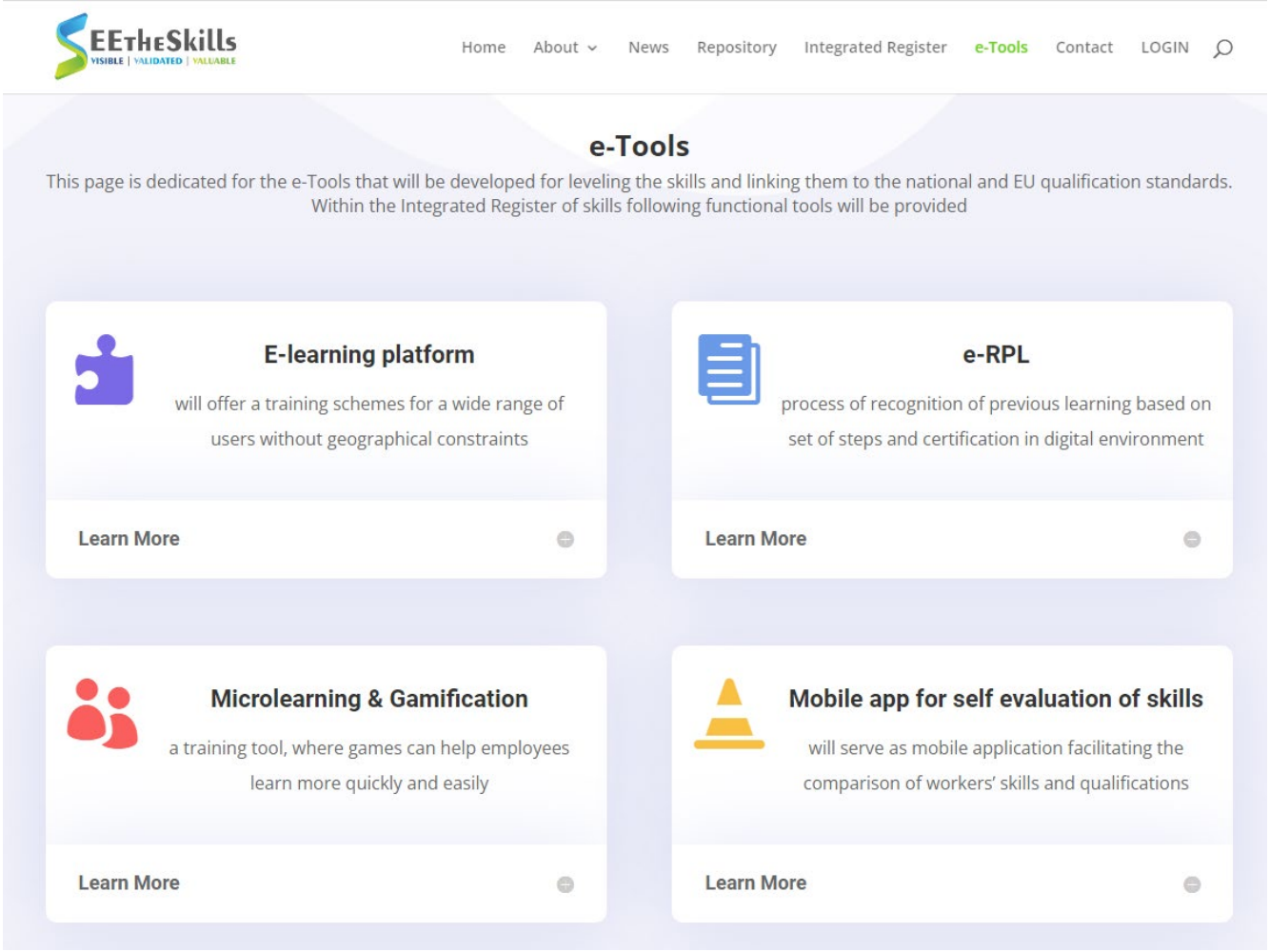
Different functionalities and e-Tools within the Integrated Register of Energy skills



-e-learning platform for organising webinars/trainings

-e-RPL tool for digitalization of the process of recognition of prior learning

-microlearning and gamification tools for upskilling

-mobile app for self-assessment of skills by workers

-Digital badge for professionals from the Professionals register

-POE (post occupation evaluation) web tool for owners

-"Find your craftsman" functionality, automatically launched for users of POE web tool as proposed solution for improvement of energy performance of building

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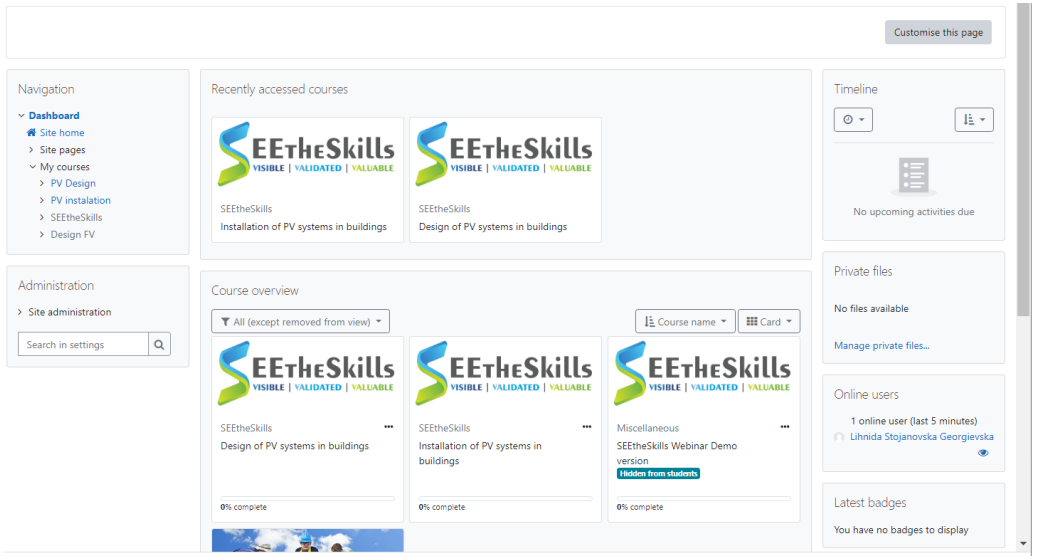
E-learning platform within the Integrated Register of Energy skills

The platform is fully accessible across all modern Internet browsers, including Internet Explorer, Edge, Chrome, Safari, Firefox, and on most devices, meaning you can learn anytime anywhere.

So what does anytime anywhere actually mean? The SEEtheSkills Learning Management System (LMS) is a central on-line platform with a search feature to find the course you need in English or in national language when available. The structure is modular; you can either take the full series of courses or just those that are useful to you.

- Self guided learning - no dates and deadlines
- **Easy-to-use intuitive Moodle based platform**
- Modular trainings – selected module or a series of courses
- Full access to the training material, video presentations, assignments and direct contact to the trainer or other classmates



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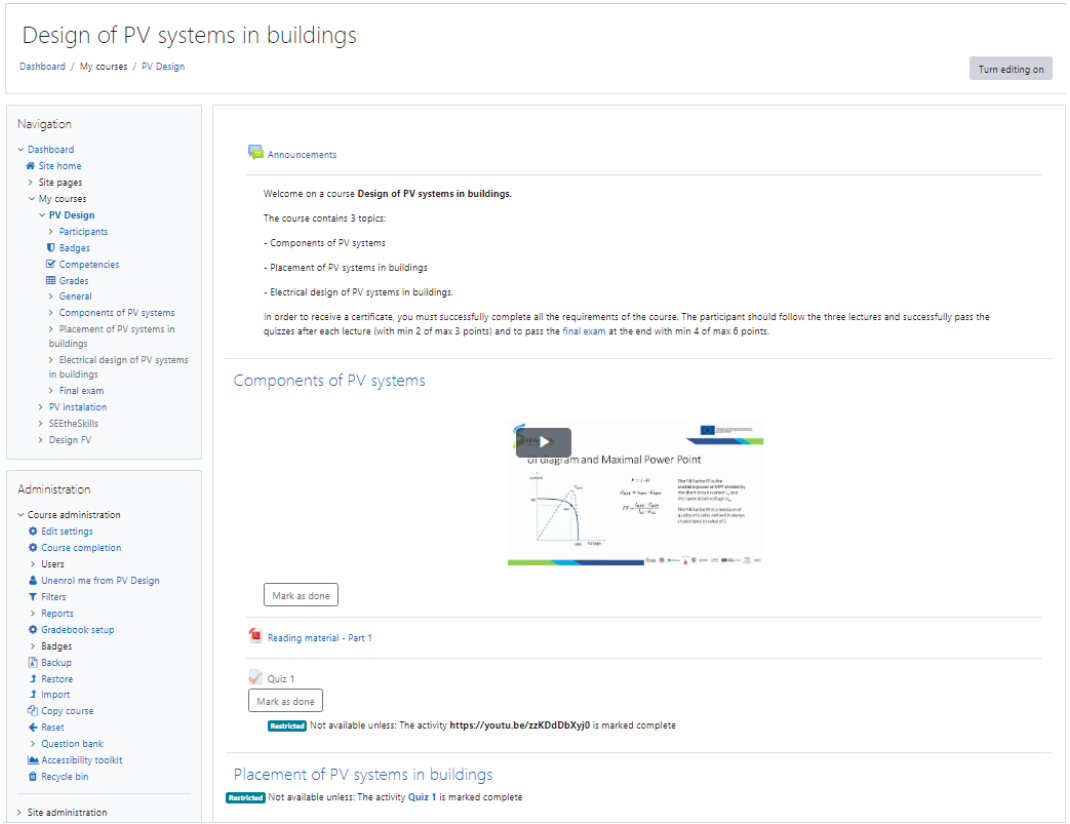
Content of E-learning platform within the Integrated Register of Energy skills



Available micro learning pieces on SEEtheSkills e-learning platform:

- Installation of PV systems in buildings
- Design of PV systems in buildings
- BIM Certification vs Certification in BIM
- BIM skills – Necessary skills in Construction 4.0
- Effective data collection for digitization of existing assets
- Effective coordination and clash-detection processes in pre-construction phase
- Cross-craft skills influence to optimization of radiant heating and cooling
- The influence of cross-craft collaboration in the design phase to potential defects during construction and operation of the building

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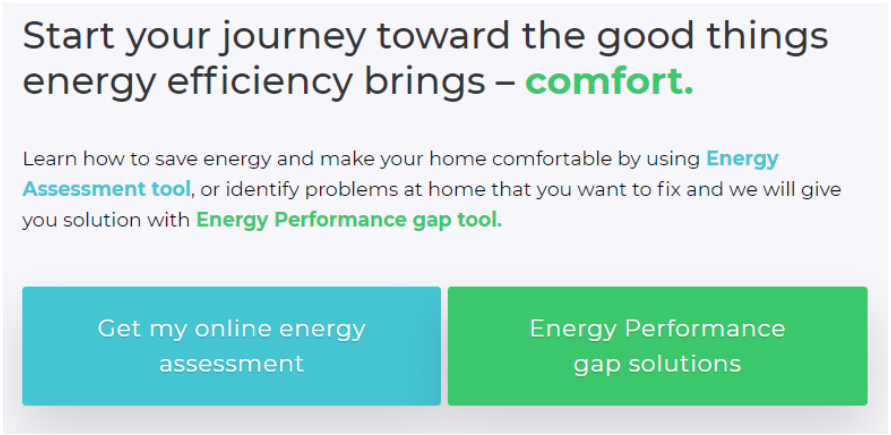
Further actions: The value of energy skills recognized by the owners – POE tool

Post-occupancy evaluation is based on the idea that better living space can be designed by asking users about their needs. Many people associate POEs with a one-time online survey provided to occupants.

- A complete POE includes hard data as well as occupants' satisfaction with the space and comfort. A full post-occupancy evaluation usually examine:
  - energy and water performance
  - performance of the indoor environment—air quality, thermal comfort, acoustics, lighting, and ventilation
  - usability of systems and spaces
  - occupant behavior



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SEEtheSkills outputs with innovation potential

No	Innovative solution
I1	Integrated repository of energy skills a) Database of training schemes b) Database of skilled workers c) Database of EE materials
I2	e-RPL tool
I6	POE web tool

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INTENSE PROMOTION !!!

INCREASED VISIBILITY !!

EASY UPTAKE OF RESULTS !

VALUABLE IMPACT

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Conclusions

Sustainable offer of Energy skills

Sustainable future

Sustainable construction

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Let's change the workforce to change the sector !!

Thank you

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