Educating energy efficient craftsmen in Sweden to 2020

BUILD UP Skills SWEBUILD

The project has strengthened qualifications for an educated building workforce in Sweden regarding energy efficiency and renewable energy. Targeting craftsmen, construction workers and installers, the project has: 1) created conditions for efficient rollout of large-scale training in energy efficient building techniques, 2) identified and prepared quality curriculums and training materials of high international standards and 3) trained trainers that by extension have delivered and will continue to deliver fit for purpose on-site training for craftsmen. The name of the interactive education programme developed during the project is “Energibyggare” (Energy builder). Within the project, trainers have been trained in the Energibyggare education and have in turn trained colleagues and fellow professionals. The training encourages dialogue between different occupations and professions at a construction site. It consists of 6 modules: Introduction, The building as a system, Thermal insulation, Airtightness, Moisture and Technical Installations. The whole training programme is available online at energibyggare.se. Specific objectives for the Energibyggare education were to organise at least 50 training courses where 500 trainers were educated. In the long term, 2020 and beyond, the ambition is that most of craftsmen and installers in Sweden will be educated Energibyggare. During the project period 802 trainers were educated and 2350 Energibyggare.

Results

The main results are:

- An action plan for life-long learning in the building sector based on the Swedish roadmap in pillar I project is established and implemented. The action plan(s) can be found on the project website www.energibyggare.se.
- A joint basic supplementary training course on sustainable building based on an on-site training concept. The training "Energibyggare" (Energy Builder) is an interactive web based education, available free online, consisting of six modules (Introduction, The building as a system, Thermal insulation, Airtightness, Moisture and Technical Installations) for sustainable buildings aimed for craftsmen. It can be used on computers, tablets and smart phones on-site.
- The training is available at anytime at www.energibyggare.se i.e. as just-in-time training on-site. The after-life of the Energibyggare education after the end of the BUILD UP Skills SWEBUILD project is secured.
- A train-the-trainers education concept with freely available course material. 60 training of trainers occasions have been organised. During the project period 802 trainers have been educated that are supervisors of the Energibyggare education and can train fellow craftsmen and other professionals to become educated and registered Energibyggare. As of 2017-10-24 there are 2 350 educated Energibyggare (trainers included) in Sweden.
- A quality control system of the Swedish training curriculum based on international standards
has been developed. A thorough quality control system has been implemented built on approved education and evaluation models, securing that the learning methods are sufficient and efficient, as well as ensuring that feedback is continuously improving the education. Also, educated Energibyggare can have their competence registered in a national competence database connected to the Swedish construction industry identity card, ID06.

Lesson learned

The main interim lessons learned are:

- Although using massive marketing activities it is not easy to reach out and get a high interest from businesses in the construction and installation sector. The project time of three years might seem like a long time in the beginning but to develop, implement and educate thousands and thousands of craftsmen takes time. To reach out and implement the education in very large construction companies is complex and a time-consuming process.
- Finding working hours for the trainers in the target groups to educate their colleagues to become Energibyggare is challenging. It is also important to find the right learning level in the education material. Also, several issues call for attention in the building sector, energy efficiency is only one of many areas to be addressed through further education.
- An interactive web based educational tool is an effective and inspiring learning method but is very time consuming and complex to develop. An easy accessible training material, always available free online has been a great advantage. A strong partnership reaching out on broad scale to the construction industry has supported the implementation of the training a lot. To develop continuous marketing activities at different levels is great importance. Working on cross-craft understanding has been prioritised from the beginning and has been appreciated by the participants.

Partners and coordinator

| Energy Agencies of Sweden - Energikontoren Sverige [1] | Sweden |
| Sveriges Byggindustrier Service AB [2] | Sweden |
| Installatörsföretagen [3] | Sweden |
| Teknologisk Institut [5] | Sweden |
| WSP Sverige AB [6] | Sweden |
| Alingsås kommun [7] | Sweden |
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Name: Per-Johan WIK
Budget

Overall budget: 1,961,304,00 € (EU contribution: 75,00 %)

In brief

Sector: BUILD UP Skills

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Contract number: IEE/13/BWI/708/SI2.680176

Website: http://energibyggare.se/

Source URL: https://ec.europa.eu/energy/intelligent/projects/en/projects/build-skills-swebuild

Links