



### TRAIN-TO-NZEB: A Highlight at the International Passive House Conference



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World-class training on energy efficiency and RES in buildings, improving the knowledge and skills in the construction sector through practical exercises, demonstrations and consulting services for Nearly Zero-Energy Buildings (nZEB), based on the Passive House concept.

There was no better place to promote this quite straightforward mission of

the Train-to-nZEB project than the International Passive House Conference itself. A special demo model was designed and constructed by Passive House Institute and displayed in the exhibition hall, just across the stand of the Darmstadt-based research institute. More than 1000 participants at the conference - among them a strong group of nearly 200 Chinese specialists - had the chance to test their knowledge and skills and apply by their own hands the most appropriate materials to provide airtight connections at the trickiest places. And yes, we got this on TV - if German is your language, check out the video link! Find out more at [www.train-to-nzeb.com](http://www.train-to-nzeb.com).



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### A Memorandum with training centre ABF shows the way for TRAIN-TO-NZEB activities in the Czech Republic



Train-to-nZEB partner SEVEN (Czech Republic) has concluded a cooperation agreement with the established training centre ABF, situated right in the historical center of Prague. The training centre will thus execute the largest part of Train-to-nZEB activities, using its own trainers with decades of experience, supported by the core team at SEVEN. The group of about 20 trainers will undergo a short train-the-trainer session based on material received by project partners and will start the execution of the trainings in the autumn of 2016, according to the project agenda.

As implied by the results of the marketing survey conducted by SEVEN in the Czech Republic, the trainings will follow short-term programmes at acceptable prices, combining different training methods (theory, practical exercises, demonstrations, video content and online training) and providing flexibility in terms of timing of the sessions. The training programmes themselves will follow the pattern set by a selection of EU-financed projects like QualiBuild and IDES-EDU, as well as contributions by project partners. And partners themselves had the chance to visit the Czech Building Knowledge Hub at the premises of ABF and SEVEN on 19th July, during the regular peer review meeting under the project.

### Ege University completes the development of the TRAIN-TO-NZEB training centre in Turkey

The Department of Civil Engineering at Ege University (Turkey) is taking big steps towards the completion of the Train-to-nZEB training centre, using the existing facilities but also delivering the necessary demonstration models and training equipment at a very fast pace. In its business plan, it sets as its goal to design and develop trainings for most crafts and professions related to nZEBs (building shell, building services and RES installation in buildings) and to support the building sector professionals (engineers, architects, municipality employees and decision makers) on delivering quality nZEB projects.



Additionally, the team sets itself the ambitious task to provide continuous technical, administrative and financial consultations for the different stakeholders' groups through case-specific consultations on integrated design, whole building nZEB design, new products and solutions, utilization of the energy saving potential, optimization of the overall energy performance, available financing sources, energy planning for public authorities, etc., according to the national specifics and the capacity. Thus, engineers, architects, municipality employees and decision makers as well as their trainers in Turkey could be brought together through a unique portal, having significant impact on the construction industry in a large and fast-developing country.

The Turkish Building Knowledge Hubs is governed by the rector of Ege University, Prof. Dr. Candeger Yilmaz. Situated in the Civil Engineering Department, it will be managed by nZEB Turkish BKH Coordinator Prof. Dr. Türkan GÖKSAL ÖZBALTA ([tozbalta@gmail.com](mailto:tozbalta@gmail.com)). More info can be found at [www.train-to-nzeb.com/turkey.html](http://www.train-to-nzeb.com/turkey.html).

### A paragon of a training programme: TRAIN-TO-NZEB Romania is ready for the challenges ahead



Looking forward to opportunities to design and build a dedicated training base, the Romanian Building Knowledge Hub will start its operations in the existing facilities of local partners URBAN-INCERC. As the concept is already developed and the preparation of the premises is ongoing, the Romanian team concentrated on the development of detailed training programmes suitable for the Train-to-nZEB concept. And, as always, they delivered to the highest quality levels.

Nearly zero energy buildings training courses have been structured for 3 categories of target groups (A - On-site Construction Crafts & Professions, B - Specialists, C - Non-specialists) based on individual modules, which could be used in different courses, in order to facilitate

access to single or multiple courses with possibility to acquire tailor-made skills and competences linked to the qualification level and/or basic occupation. Assuming that participants in this process are familiar with the conventional practices in the building sector and already possess the relevant skills for the design of conventional buildings, the content is limited to essential additional knowledge related to nZEB. This knowledge is framed out in 20 modules, each with detailed description of knowledge and skills gained, competence acquired, learning outcomes, training aids and materials, evaluation procedure and total duration. A wealth of knowledge and didactic approach which waits to be shared with future Train-to-nZEB network members.

In preparation of the business plan for BKH Romania, a series of meetings were organized with possible partners as: Romstal, RoGBC, ABMEE, Passive House Association, GENIUS Training Center, Technical University in Cluj-Napoca, EvoHouse. As a result 2 Memorandum of Understanding were signed and 5 more are in preparation.

### Local and international business partners back up the Ukrainian BKH

The Ukrainian Building Knowledge Hub will be set up within the Kyiv National University of Construction and Architecture (KNUCA, Ukraine) following a Memorandum of Understanding already concluded. The future trainers will be selected from a pool of leading experts in energy efficiency in construction and architecture; it is anticipated to mobilize expertise of KNUCA and professionals from partner companies who participate in the development of norms and regulations and national building standards.



In order to meet this goal, project partner MDI mobilized support from a wide range of EE equipment and materials producers: Rehau (windows, equipment for engineering networks); TechnoNIKOL Corporation (energy efficient heat insulation); Henkel Bautechnik (energy efficient construction materials and equipment, façade systems); Danfoss (engineering networks and energy efficient equipment); Aklima (ventilation and air conditioning systems, alternative energy sources); Manez (protection from sunlight and sound of energy efficient buildings), Vaillant (heating and ventilation systems), URSA (heat insulation and sound proof materials), Wienerberger (ceramic materials and ware: blocks, bricks, tiles, other building envelope materials suitable for passive houses), Techno-Alliance (building materials and aluminium structures, including structures for building envelope and translucent systems). With their assistance, detailed training programmes are already developed, using the experience and also the existing training facilities and laboratories of local manufacturers. The trainings are expected to start in October 2016, as hopefully they will be attended and supported by Train-to-nZEB project partners from Passive House Institute and Passive House Academy. You can find more about the solid Ukrainian contribution to Train-to-nZEB here: [http://www.mdi.org.ua/train2nzeb\\_about\\_en](http://www.mdi.org.ua/train2nzeb_about_en).

### Highlights from the ground

One of the Irish Train-to-nZEB partners - LIT - have provided to the local Building Knowledge Hubs and the members of the Train-to-nZEB network the full set of training materials resulting from the BUILD UP Skills project QualiBuild ([www.qualibuild.ie](http://www.qualibuild.ie)). An invaluable contribution to our training activities, which is highly appreciated by the whole project team!

Passive House Institute is developing an online training module for non-specialist audience, which was presented for the first time during the peer review meeting on 19 July in Prague. A timely input before the actual start of the trainings and demonstrations, it will provide a solid knowledge base for the whole network, on which further initiatives could be developed.

The first dedicated Masters programme in energy efficiency in buildings was approved by the Academic Council of the University of Architecture, Civil Engineering and Geodesy in Sofia. Supported by Train-to-nZEB, project coordinator EnEffect will lead the discipline "Passive House design and construction". The course will start as soon as the next academic year.

On 13th of May 2016, INCĐ URBAN-INCERC organized the 11th edition of Institute's National Conference where the Train-to-nZEB project was presented - with undisputed success - during a session dedicated to quality and compliance of construction works for implementing nZEB concept in Romania.

A Train the Trainers (TTT) pedagogical module was developed by BDG, to be adapted to the all the other countries involved in the project. Also BDG drafted the Business Plan for BKH RO which will be continuously updated. FPPI is in course of obtaining authorization for the training course "Installer of Solar PV Systems" which will be provided within the BKH RO.

On 22-24 of June, the international conference Central Europe towards Sustainable Building 2016 (CESB16) was held in Prague, hosting 320 delegates from 48 countries of the world. T2nZEB was successfully presented by SEVEN, and a special session Education towards nearly Zero Energy Buildings (nZEB) was organized within the conference programme.

Future trainers in the Turkish BKH, most of them specialized in Energy Management, Solar Energy, Energy efficient Design-Architecture, Construction Materials and Photovoltaic Systems, attended to a seminar and a subsequent discussion concerning the offered educational programmes in Ege University, Department of Civil Engineering. The training programmes themselves are about to be finalized, and the courses are considered to start by 2017.

The initial list of trainers is already concluded, including Oleg SERHEYCHUK, Professor at the Department of Architectural Structures of the Architecture Faculty of KNUCA; Volodymyr SKOCHKO, Associate Professor, Coordinator of international activities of KNUCA on energy efficiency; Oleksandr POGOSOV, Associate Professor, Head of Laboratory at the Department of Heat Technology of Sanitary Engineering Faculty of KNUCA.

### News from us and our partners

The 8th EU Exchange Meeting under the BUILD UP Skills initiative took place on 2-3 June 2016 in Budapest. It was open to BUILD UP Skills project coordinators and partners involved in the BUILD UP Skills Pillar I, completed and ongoing BUILD UP Skills Pillar II, and ongoing Horizon2020 construction skills projects. Train-to-nZEB was dedicatedly presented at the meeting, once again stating its willingness to cooperate with all other relevant initiatives. You can find more information about the initiative and EU exchange meetings at [www.buildupskills.eu](http://www.buildupskills.eu).

The C4E forum, held on 22-25 June near the Bulgarian city of Balchik, staked a claim for becoming the most expected community building event on energy efficiency in buildings in Central and Eastern Europe's. Among the most ambitious efficiency projects happening in the region, Train-to-nZEB took its deserved place and attracted strong interest from the participants in the dedicated session construction skills training. Lots of new ideas also coming up, and we are definitely interested to be in there for the years to come...

The BUILDUPON project will host renovation leaders from across Europe at a two day Leaders' Summit in Madrid on 20-21 September 2016, to take on this challenge. The Summit will focus on how we co-design and co-implement long-term national renovation strategies to radically improve the energy efficiency of our existing buildings - building ambition ahead of COP 22 and the release of the EU's energy efficiency package. Train-to-nZEB will also be there, supporting strategies' implementation with the knowledge and skills necessary to make them real.

The Passive House Institute has recently released an all-new, comprehensive set of training slides for the training of Architects, Engineers and other specialists. It is intended for use in training courses within the Certified Passive House Designer course and covers all relevant aspects. More than 60 course Providers internationally deliver such [courses and examinations](http://www.passivehouseinstitute.com/courses). Materials are currently available in English language, translations are welcomed. Classroom training courses are supplemented and can in future be blended with new E-Learning approaches: A [fundamentals course](http://www.passivehouseinstitute.com/fundamentals) is operational while a shorter and more general course for a wide audience of non-specialists is under preparation in the scope of the Train-to-nZEB project. A similar training programme aimed at the [needs of tradespeople](http://www.passivehouseinstitute.com/tradespeople) will be implemented in the Building Knowledge Hubs of the Train-to-nZEB project.

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