



End of backwardness in Czech construction

The new National Plan for Education shows how to prepare craftsmen to a higher standard of construction

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In less than eight years, until 2020, we will need tens of thousands of craftsmen able to build buildings with almost zero energy demands. The demand for these buildings provide higher energy standards for construction, which Parliament approved last year. The problem is that most craftsmen does not have the necessary qualifications or experience. This must change. Therefore, the National Plan of education in building towards buildings with almost zero energy was launched.

Plan was prepared by a consortium of major players in the Czech construction industry led by the Ministry of Industry and Trade, associations such as the Passive House Centre, Czech Chamber of Certified Engineers and Technicians, Czech Green Building Council, Association of Building Entrepreneurs, ABF Foundation and consultant firms as EkoWATT, ENVIROS and SEVEN. The creation of the Plan is supported by a grant from the Intelligent Energy Europe under the initiative Strengthening Skills (Build Up Skills).

The current situation with the construction of buildings with low energy consumption in the Czech Republic is grim. Assuming that about 29,000 new flats are built in a year only two percent of them meet the standard of "nearly zero energy". In the "reconstruction", the figure is even lower. The worst situation is in the publicly owned buildings where there is currently a high energy standard building hardly to be found. Still, this segment should set an example.

Lack of energy-efficient buildings in the Czech Republic, however, is understandable. Broader emphasis on energy efficiency was missing in the past and it also lacked the experience. "The purpose of the National Education Plan is to increase the number of skilled workers who will be prepared and trained to renovate the existing energy-intensive to energy-efficient buildings (commonly known as "reconstruction"), as well as for the construction of new buildings with almost zero energy" Jiří Karásek explains, one of the key authors of the National Plan of Education of the company Seven.

The plan focuses primarily on workers who are every day on the construction site and are of key importance for energy-efficient buildings construction - plumbing-heating engineers, chimney sweepers and stove builders, electro-mechanics, insulators and inspection technicians. In these professions, there are about 60,000 people who will need to be educated. In addition, the plan envisages a large number of educational presentations for the general public.

"The estimated cost for implementing the plan are 775.5 million crowns, which is investing around 13 000 CZK per trained craftsman," says Jiri Karasek. Funding should be covered largely from the European Social Fund (47%), private institutions and resources of the participants (39%) from public sources (14%).

Immediate steps to implement the National Plan for Education will now work towards a national qualification platform in building that will be formed before the end of this year. The platform core will consist of members of the consortium, drafting the National Plan of education.

Key measures of the National Education Plan:

1. The creation of centers for lifelong learning for selected professions and building a model program of courses for workers, focusing on the new challenges arising from energy performance requirements for buildings.
2. Lifelong learning for each monitored profession - use craft manuals and curricula of the requalification courses, preparation for exams.
3. Amendments in catalogues of knowledge and skills on individual professions in relation to the implementation of the requirements of the Directive on the Energy Performance of Buildings (EPBD II).
4. Creation of qualification and assessment standards for construction supervision, technical supervision and designers supervision.
5. Creation of a database of workers with registration of their completed training.
6. Use of quality assessment systems products and technologies for energy-efficient construction and making their results available for the craft professions.
7. Construction of a sample building as permanent and regularly updated exhibition displaying current technical solutions, products and technologies with possibilities of learning how to use them.
8. Increasing young people's interest in joining the construction industry (campaigns in schools).

Motivation for energy savings:

1. The prices of energy and resources constantly grow. The heat from central sources increased by 60% over the last 10 years, natural gas by 180%, electricity for households by 130%.
2. The price of suitable technologies and products for energy efficiency in buildings is continuously decreasing, and they increase their effectiveness. A good example is the development of heat pumps, which for the past 10 years became cheaper by about one third, while their efficiency increased. A similar development occurred with windows or solar panels.
3. High energy demand buildings are not only expensive but also detrimental to the environment.

Download:

The National Plan for Education in the construction industry towards buildings with almost zero energy consumption

http://czgbc.org/Download/Narodni_plan_vzdelavani_ve_stavebnictvi.pdf

National status quo analysis, training of construction workers the energy efficiency of buildings and RES

http://czgbc.org/Download/Narodni_analyza_soucasneho_stavu.pdf

More information:

<http://buildupskills.eu/national-project/czech-republic> and <http://www.build-up.cz>

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