

The Hungarian building sector

At least 70% of the 4,2 million buildings in Hungary do not meet the technical requirements of modern heating - therefore they need renovation. Approximately 10% of the buildings are outdated to such an extent that they need to be rebuilt. This situation is improving thanks to the implementation of residential energy efficiency programs over the past few years.

Energy status and characteristics of the Hungarian buildings

In residential energy consumption Hungary is in the top ten compared to the 27 countries of the EU. Therefore renovation and modernization of Hungarian buildings has a particularly significant potential in the field of energy. Households are the largest users of fuel and heat energy, responsible for 39%. The most used heat transfer in Hungarian households is natural gas, followed by wood and district heating.

The structure of the construction industry

In the period of 2007-2009 building construction fell on average 10%, and though public works were also more dynamic over the past two years, the weight of the two main groups in the building industry almost evened out by 2009.

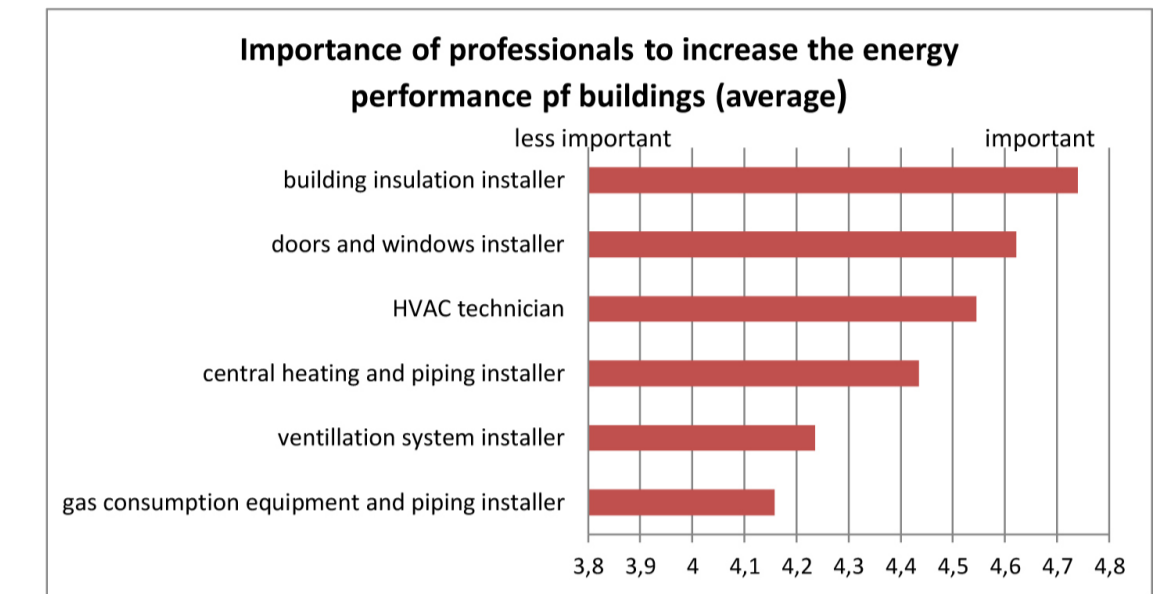
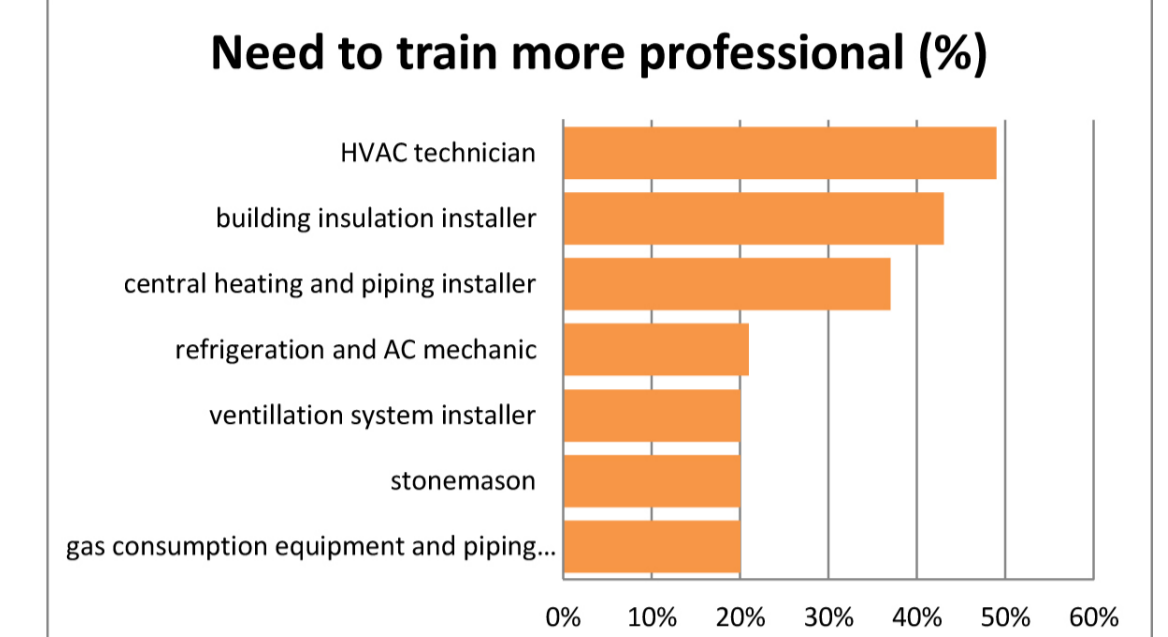
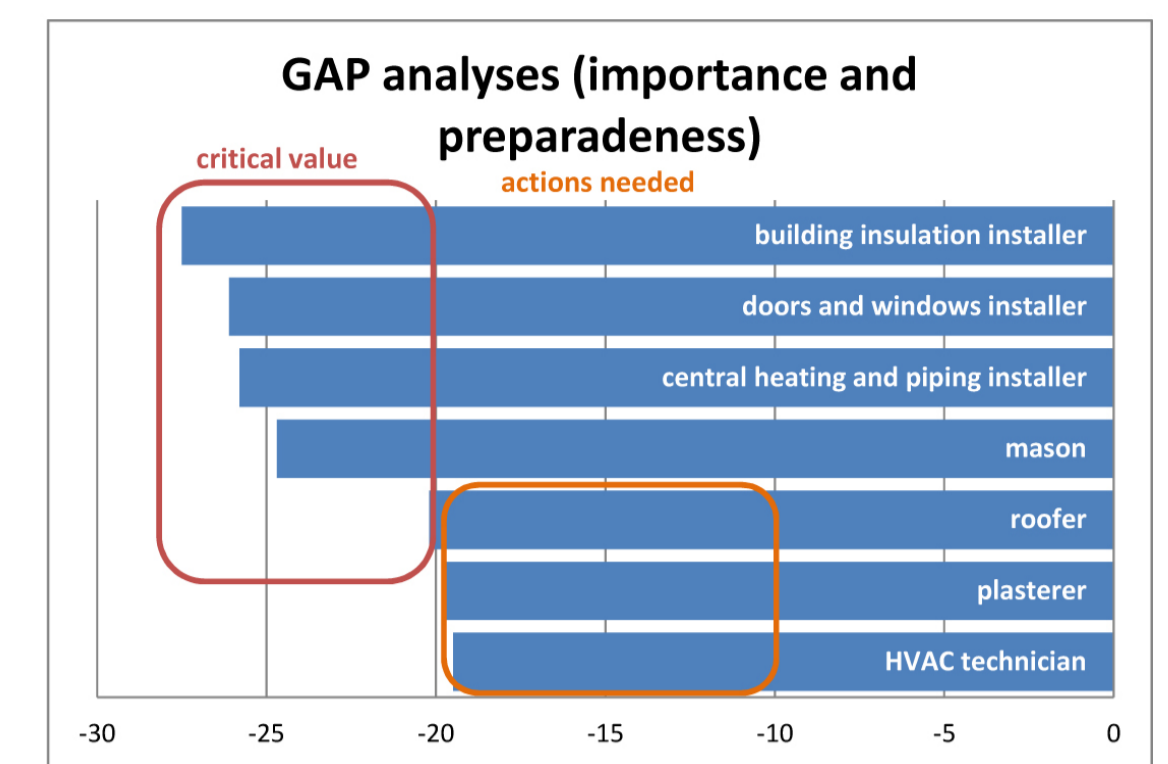
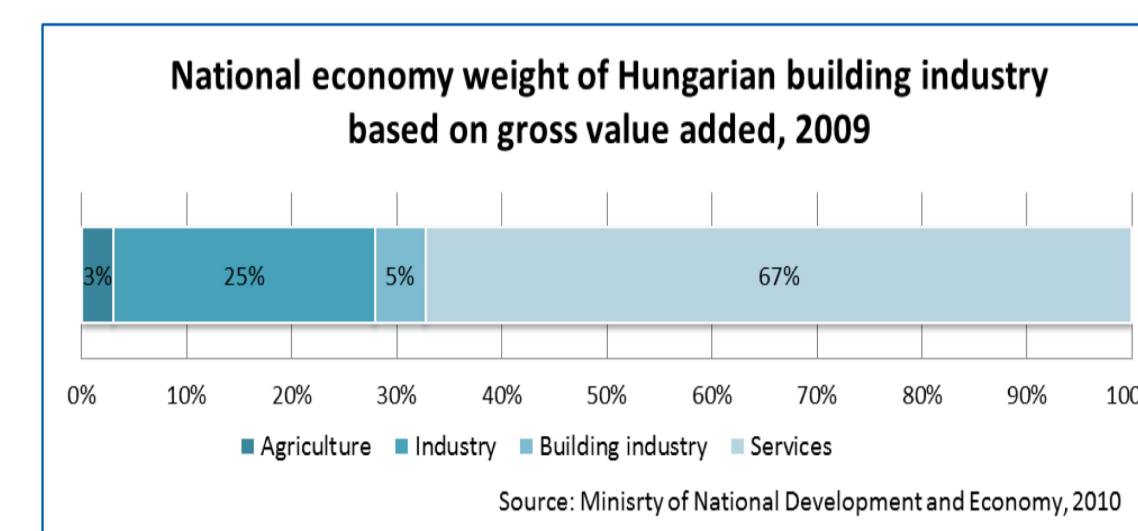
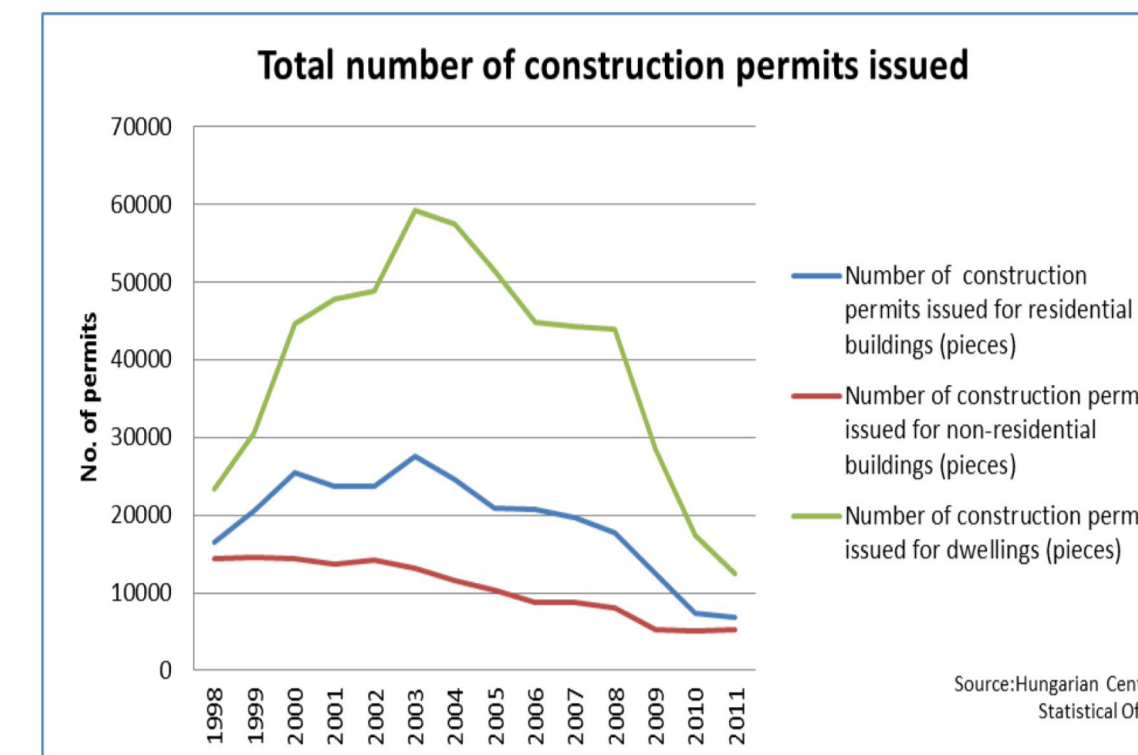
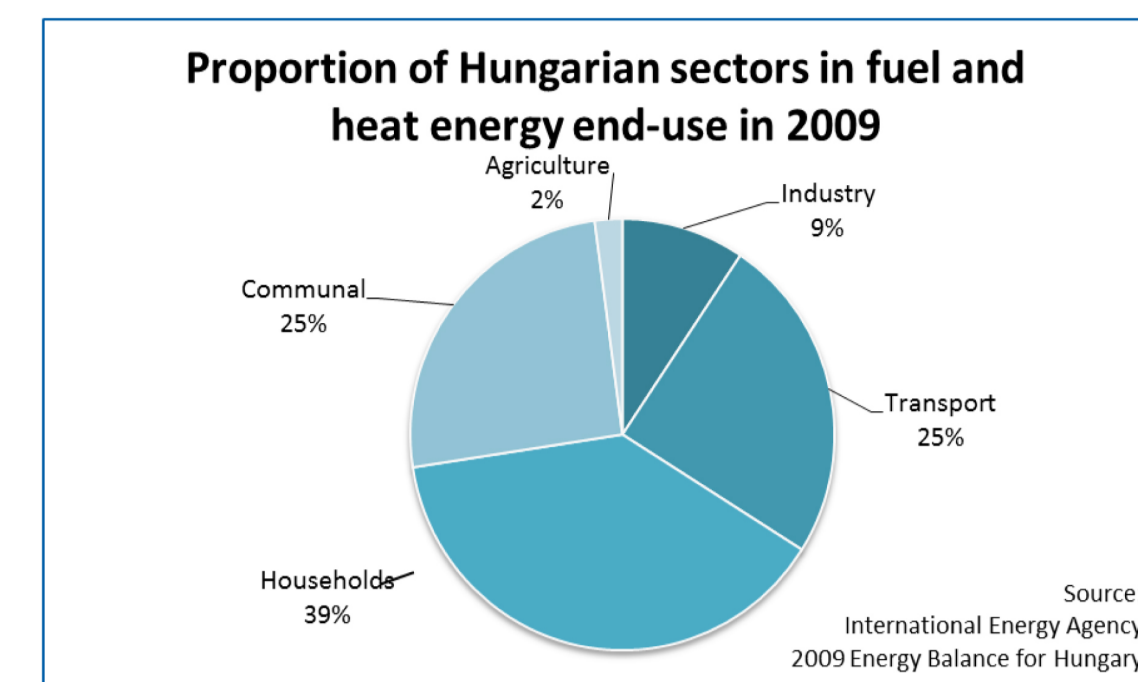
Housing construction

The Construction industry, which has a decisive role in the national economy, performs worse year by year - it is in a deepening crisis. Currently there are about ten thousand unsold new buildings, investment is modest. Lack of information is one of the characteristics of the sector; the significantly diminished market should be informed about the benefits of better quality and better achievements of energy levels. Independent research and financial institutions forecast stagnation of the building industry in 2012, positive changes only could be started from 2013, 2014.

Results of questionnaire on GAP analyses

Two questionnaires (one for the building industry one for the training companies) have been prepared to establish how the building economy's[1] needs and expectations concerning the qualification of professionals match the course offering of training institutions. All together 247 responses were received and analyzed.

The point of a gap analysis is to express satisfaction with the competence of the representatives of a certain profession relative to the importance of the profession concerned. A negative gap value indicates that representatives of a given profession perform worse than expected. Professions with an absolute value between 10 and 20 require more attention, and absolute values above 20 imply serious criticism. Professions with critical values has to be addressed in Pillar II.



Roadmap

The Roadmap and the objectives and provisions of the Action plan conceived on the basis of 218 surveys and 30 interviews conducted with building industry and training/education experts. The members of BUS Hungary consortium discussed it widely also on three platform meetings. The final version was approved in agreement with the stakeholders and platform members. The Roadmap covers not only the supply (education) side but also pays attention to the demand (building industry) needs; therefore the measures are grouped into two major groups.

Measures for Building Industry

Regulation of Building Industry

Building energetics can be the breaking point of building industry in the current economic circumstances. It can contribute to the national 2020 building targets with minimum costs and maximum social benefits. Important to highlight, that heating energy has high energy efficiency saving potential.

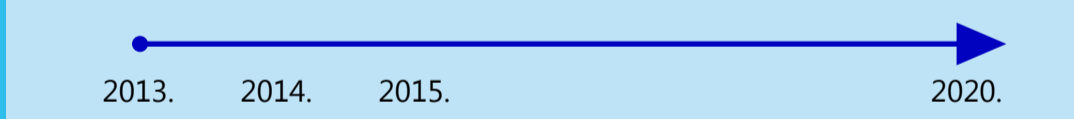
Unified coordination and cooperation in the building industry

Governance of building industry and other related areas are currently fall under different ministries. It is necessary to create an institutional framework for the uniformly coordinated building industry.

There are many independent professional organizations in the building industry with wide range of activities. In order to co-operate clearly with each other and the government the competence of professional organizations need to be designated.

The communication between the professional organization and the government is incomplete. With the usage of existing and the opening of new channels the communication and co-operation can be necessarily improved.

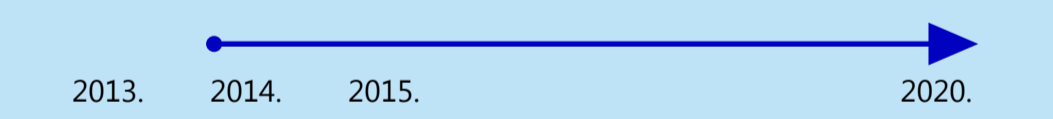
Due to the frequent changes in legal regulation, a continuous monitoring of expected changes is needed in order to inform professional organizations well in advance.



Company registration, qualification and authority management system

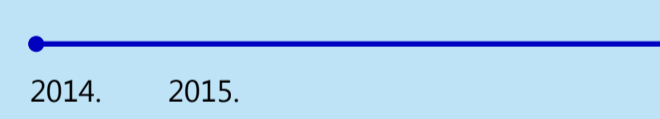
The company registration, qualification and authority management system is fragmented. A simple and transparent system is necessary.

The reconsideration of legal standards is also suggested in every field.



Building energy regulation

Up-dated and higher values should be aimed at building energy regulation. The legal definition and application of NZEB is required in connection with new buildings. There is a need to define to what extent building renovations (type, number and depth) and new buildings have to contribute to the 2020 targets.



Awareness program, creation and stimulation of demand in the building industry

The result of general decline in the building industry is the dramatic reduction of construction and renovation orders. The building energy retrofits and sustainable building solutions can mean the breaking point. Currently, the biggest barrier is the wrong attitude of the clients and the limited resources for tenders.

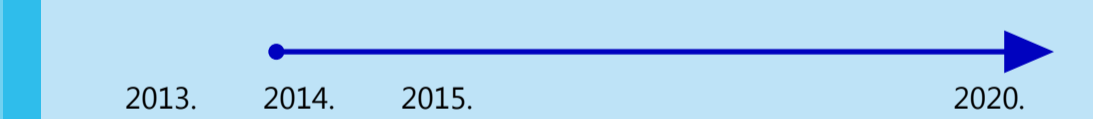
Awareness program for building energetics

Most of the clients unfortunately are not aware of the importance of building energy retrofit and renewable energy sources, accordingly there is no market demand.

In order to increase demand it is essential to harmonize the existing information and advisory networks. Providing support to existing organizations and consultants is important.

It is necessary to provide awareness program during public forums and also in the media surface.

Continuous, multi-channel awareness raising programs should be initiated.

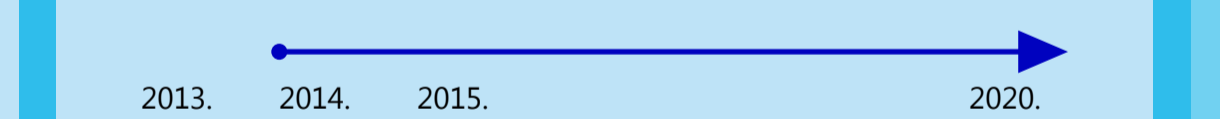


Tender system

Increase the number of orders with subsidy opportunities and with the support of financial products.

The tenders should be simple, transparent and continuous. It is essential to transform the criteria and give higher priority for technical aspects and quality. Complex refurbishments should be prioritized.

Introduction of housing savings bank products and housing loan scheme for renewable energy improvements is necessary.



Measures for education

The following provisions for education refer to adult training offered in and outside the school system and also for the Hungarian VET and accredited adult education system.

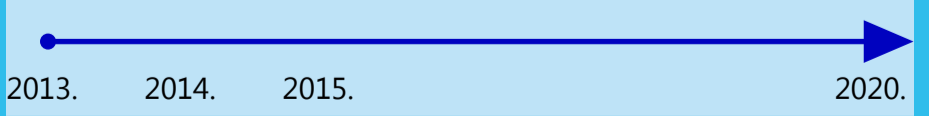
Supporting measures for trainings

Educational system

The quality and availability of the courses in vocational and adult education institutions are not equal in the country.

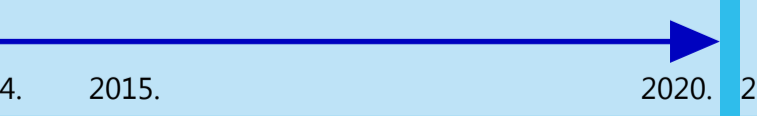
There is a need for uniform training syllabus, curriculum and training conditions. The institutions and the offered trainings need to be organized in one coordinative system and database.

An organized cooperation between educational institutions and professional organizations is also required in order to ensure high and up-to-date knowledge levels.



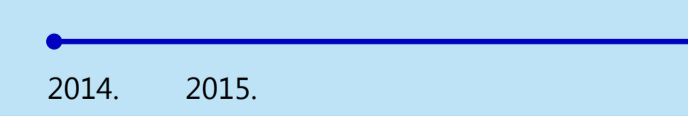
Training of trainers

Instructor training and their in-service training are central to the entire process. The appeal of the teaching profession and career must be created and restored. Introduction of credit point system (which already exist in the school system based vocational training) is recommended in the continuing education of instructors.



Development of curriculum

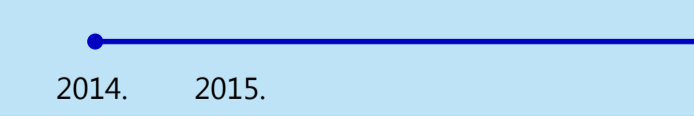
As the curriculum is dated in the vocational and adult education the importance and method of energy saving is currently not educated. There is a high need for regularly updated curriculums with fundamentals and an e-based system for technologies that are subject to rapid development.



Development of technology

To ensure qualitative practical training the cooperation between training institutions and companies is essential in the related fields. Training institutions should be aided in purchasing modern equipment.

The companies need to be stimulated to take part in practical training.



Provisions for training stimulation

Stimulating support

The companies have no or little fund for the employee's continuous education. The adult education has high cost and return of the investment is uncertain. The training time also cause outage in the working hours. During the employee's training the companies should be supported.



Suggested trainings Tasks for pillar II.

In each vocation and related field which contributes to achieve the 2020 climate and energy policy targets in Hungary; accredited adult training needs to be developed, because this system can be flexible enough to ensure that the existing workforce is continuously being trained. It should be further examined which professions need to be mandatory based and which could be voluntary. In tenders and procurement procedures companies with staff or individual entrepreneurs that has been taken part in the accredited adult training course should be an advantage or even a requirement. Accredited training courses should be developed in the following professions: building insulation installer, doors and windows installer, bricklayer, roofer, tinsmith, waterproofing installer, central heating system mechanic and pipefitter, gas equipment mechanic, cooling system and air conditioner mechanic, building engineer technician, furthermore the following fields in connection with renewable energy resources: solar collector, PV, heat pumps and biomass boilers system installers. Qualified technical managers are also highlighted.

