



EDUCATION FOR THE ON-SITE WORKERS TOWARDS TO THE NEARLY ZERO ENERGY HOUSES

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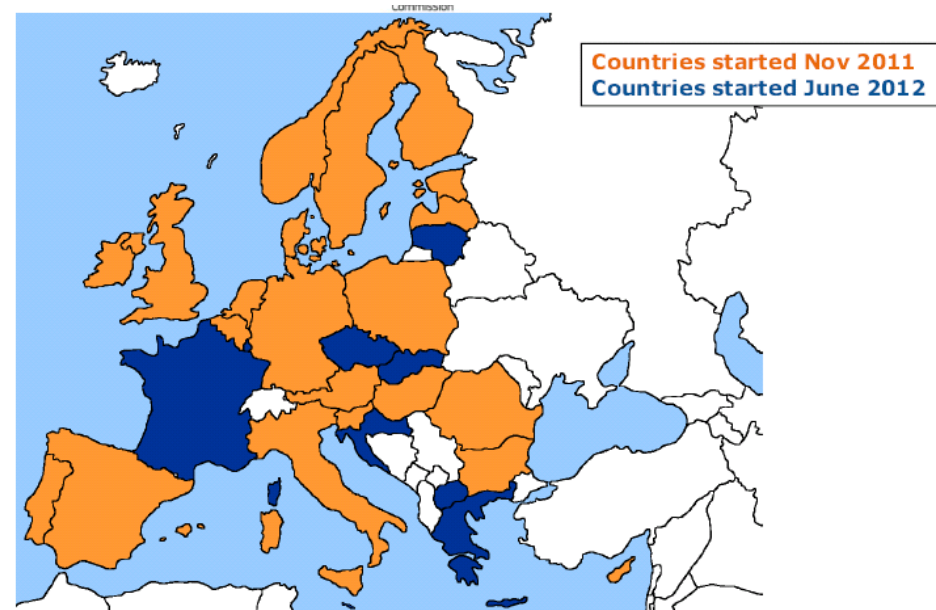
SEVEn, Centre for Efficient Use of Energy

Petr Zahradník

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AGENDA

1. Introduction of the project and team
2. Status quo analysis
3. Barriers of the on site workers education and training in the Czech Republic
4. Current results of the project
5. Conclusion



PROJECT FOCUS AND PROJECT PARTICIPANTS

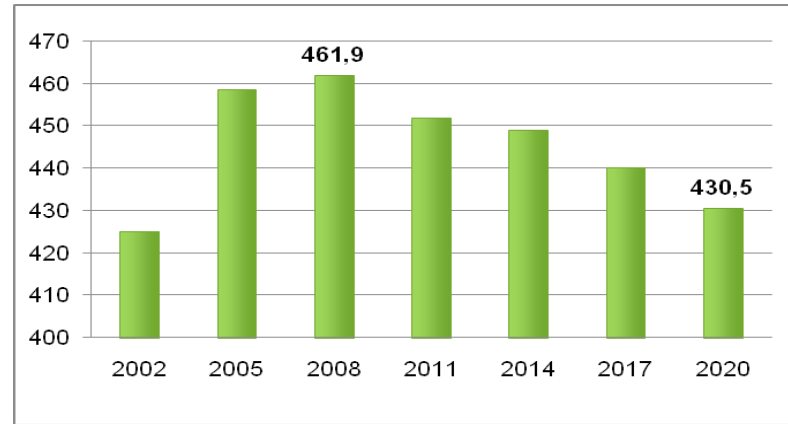
- ➔ **Project aims to provide education and training of the on-site workers to successfully meet the requirements on the Energy Performance of Buildings according to EPBD II**
- ➔ **The education and training should be provided by 2020**

Project participants

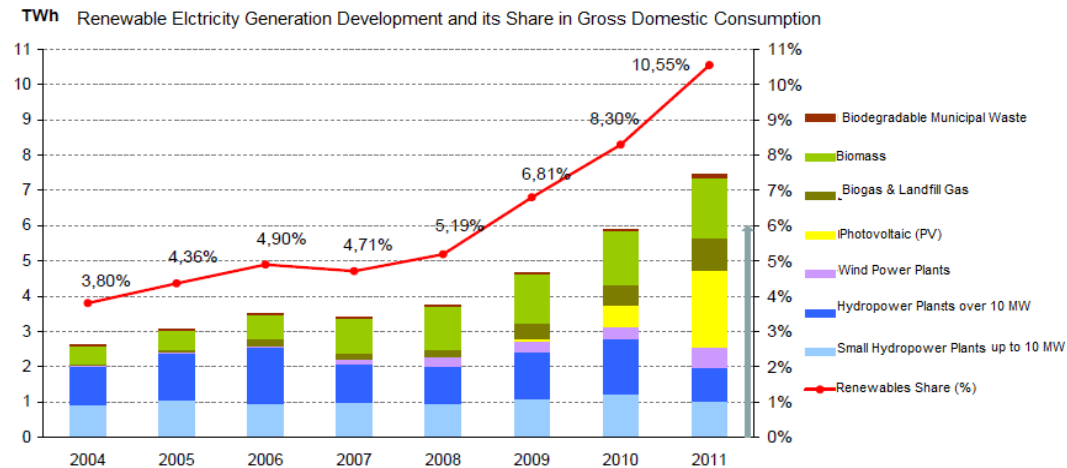
- ➔ **Public bodies** - **MPO** - Ministry of Industry and Trade, **NÚV** - National Institute for Education
- ➔ **Associations** - **ČKAIT** - Czech Association of Certified Engineers and Technicians , **CzGBC** - Czech Green Building Council , **ABF** - Architecture and Building Foundation, **SPS** Association of Building Entrepreneurs of the Czech Republic
- ➔ **Private companies** - **ENVIROS**, **EkoWATT**, **CPD** - Passive House Centre, **SEVEn**- Center for Energy Efficiency

STATUS QUO ANALYSIS

➔ Number of construction workers in Czech Republic [thousands]



➔ Development of RES



Details of the report at <http://www.build-up.cz/>

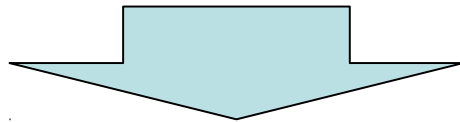
Sources: NÚV 2010, ERÚ 2012

CURRENT BARRIERS RESULTING FROM STATUS QUO ANALYSIS

- ➔ **Missing central management** of the branch
- ➔ **Low productivity and quality** of construction works
- ➔ Pressure on the using of **unqualified workers**
- ➔ **Low interest of youth** to work in civil engineering
- ➔ **Low motivation of adult** to increase their skills and knowledge
- ➔ **Unprepared population** for using and operating of passive housing.
- ➔ **Unsatisfied coordination** of construction works (poor motivation of workers)
- ➔ **Unstable support EE and RES** by the government

PROFESSIONS SELECTED FOR EDUCATION AND TRAINING

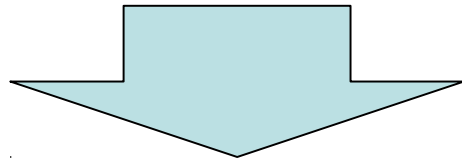
- ➔ Masons, plasterers, locksmiths, carpenters, plumbers
- ➔ Technologies + systems building services + RES
- ➔ Electricians (felt weak) + lighting + metering systems and regulations
- ➔ Middle class and higher on site managers



Approximately 60.000 construction workers should be educated and trained

PROJECT PRIORITIES

- ➔ To increase knowledge and skills of the construction management „white collars“
- ➔ Actualization of the „blue collars“ professions description in the current national system of professions
- ➔ To establish system of courses increasing knowledge for coordination of construction workers
- ➔ To develop quality control of the construction work



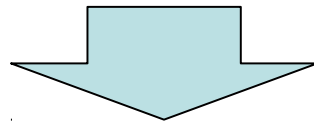
**8 measures of the
National action plan**

8 MEASURES OF THE ACTION PLAN

Measure	Cost Estimation 26 Kč = 1€	Financial Sources	Type of professions
Creation of the courses for builders	17,1 mil. Kč	ESF – 70%, MPO ČR – 15%, education organizations – 15%	1 – 4
Education and training for adults in selected types of professions	624,5 mil. Kč	ESF – 45%, MPO ČR – 15%, companies – 20%, trainees - 20%	1 – 4
Updating of catalogs NSP and NSK	22,5 mil. Kč	ESF – 45%, MPO ČR – 15%, MŽP ČR – 15%, MMR ČR – 10%, NÚV – 15%	1 – 4
Creation of the qualification standards for profession technical control of investor	3,5 mil. Kč	SPS, ČKAIT, ČKA	4
Creation of database of craftsman including their qualification and certificates	14,5 mil. Kč	ESF/ EFRR – 80%, education organizations – 20%	1-3
Connection of databases for building materials and technologies	23,4 mil. Kč	ESF – 30%, producers – 50%, trainees – 20%, Education organization – 10%.	1-3
Exhibition of buildings in nZEB standard	53,0 mil. Kč	ESF – 45%, trainees – 45%, education organizations – 10%	1-3
Increasing of Youth in building sector	17 mil. Kč	ESF – 70%, MŠMT ČR – 15%, NÚV – 15%	1-3

CONCLUSION

- ➔ Many strong leakages and also positives in the current education system have been found.
- ➔ The most important challenge for all ten project partners is the implementation of current needs in education system and law.
- ➔ **The next steps?**



Establishing of the National qualification platform
Endorsement activities and dialog with stakeholders
Detailed specification of measures

DISCUSSION



Thank you for your attention!

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Details on BUILD UP Skills "Czech Republic" at <http://www.build-up.cz/>

Details on s on BUILD UP Skills at www.buildupskills.eu

Details on on the IEE programme at <http://ec.europa.eu/intelligentenergy>