

National Implementation Plan for Build the Future Roadmap

Annex 3

National Implementation Plan

Build the Future - Roadmap

Czech Republic

1. Introduction

a) Subject of Rollout plan

The Rollout plan basically propose the way how to initiate, stimulate and develop demand for the Plus Energy Buildings in the Czech Republic as well as know-how transfer and dissemination of the PEB idea among target groups by using proposed measures and instruments.

b) Overall objective of the Rollout plan

Overall objective is, to accelerate the market development in the field of PEB in the Czech Republic as stands for positive movement when decreasing the energy consumption of building. Across the European Union some of the countries have recently adopted their legal frameworks counting on support to PEB.

The opinions of experts as resulted from stakeholder inclusion's meetings on support to PEB were not unanimous - despite a number of advantages the PEBs according to participants have (mainly benefits in terms of energy independence and environmental benefits) there are also many concerns related mainly to the overall input / output rate of the PEB life cycle. Technologies and materials required for the construction of PEB are in all respects quite demanding. In addition, despite the subsequent savings on energy, the acquisition of a PEB requires a high initial investment, which means a necessary increase of demands for various subsidies and public funding. Other concerns referred to the possible imbalances in the energy network, e.g. the unnecessary accumulation of energy on the one hand and its transient lack on the other hand, for example in the case of a day/night solar energy production or the unbalanced needs of urban residential areas / administrative and industrial zones during the 24-hours period. The solution to this problem, according to some experts, however, could be the building of so-called clusters, i.e. the entire PEB areas where the lack of energy in one house is made up with the surplus from another house and vice versa.

Discussion with Czech experts proved that PEB are considered as one of the important aspects of future energy policy. Majority of experts see PEB concept as generally positive and logical step when dealing with energy efficiency and environmental issues. However, many challenges, which need to be addressed, remain. First, the initial investment is still relatively high and public support is still considered necessary. Moreover, the cost-effectiveness in terms of the whole life cycle has not been scientifically proved. Second, the energy production-consumption mismatch, and other unexpected technical issues, can cause severe problems.

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2. Demand-Side Target Groups – Occupants, market actor, etc

a) Key target groups

- Public sector
- Private (residential, household owners)
- SME's - architects, construction consultants, engineers

3. Challenges, Obstacles, Potentials

The lack of knowledge and financial demands are probably the predominant reasons why only two PEB has been completed in the Czech Republic. Considering the potential benefit of the PEB concept as described by the experts on one hand and gaps in knowledge and finances on the other proves the need of public support before the PEB is fully accepted and developed on the market. Importantly, the DSIs developed within the project were in general well accepted with the exception of the educational one. The DSIs shall thus help to capitalize the opportunities the PEB can offer.

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4. Demand-side policy instruments

a. Demand-side policies already in place in the country CZ

Country	Region	Area of demand side instrument/policy	Name of instrument	Responsible Organisation	General description
CZ	All regions except Prague	Funding	New Green Savings Programme	State Environmental Fund of the Czech Republic Ministry of the Environment of the Czech Republic	The Programme's objective is to improve the environment by reducing greenhouse gas emissions through the improved energy efficiency of buildings, the support of residential development with very low energy performance and the efficient use of energy sources.
CZ	Moravia-Silesia region; Ústí region	Funding	New Green Savings Programme	State Environmental Fund of the Czech Republic Ministry of the Environment of the Czech Republic	Funding in these regions increased by 10%
CZ	All regions except Prague	Consultancy/funding	New Green Savings Programme	State Environmental Fund of the Czech Republic Ministry of the Environment of the Czech Republic	Blow door test to measure the airtightness important for PEB and NZE buildings (maximum funding 35k CZK)
CZ	All regions	Financial instrument	The National Housing Development Fund	Ministry of regional development	Loans with guaranteed interest rates
CZ	Brno region	Awareness raising/consultancy	Passive house open door (including 1	Passive House Institute	Independent non-profit organization

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			PEB), free consultancy, trainings		
CZ	Prague, Pilsen, Litoměřice municipality	Funding	Support for solar thermal system development for individual housing	Prague, Pilsen, and Litoměřice municipality	Financial support for solar thermal system development for individual housing
CZ	Litoměřice, Chrudim, Kopřivnice, Brno municipalities	Strategy/policy	The Association of Municipal Energy Managers	Litoměřice, Chrudim, Kopřivnice, Brno municipalities	The association was officially created by four founding members – Litoměřice, Chrudim, Kopřivnice and the district of Nový Lískovec (in Brno), on 24 October 2014 on the occasion of the Covenant of Mayors workshop entitled "Energy for cities of the 21st century" co-organised by the city Litoměřice. The objective is to strengthen the interest and actions of Czech municipalities, regions and national institutions towards achieving the EU energy and climate objectives
CZ	Central Bohemia region	Awareness raising/public labs	EURL3A knowledge alliance	Czech Technical University in Prague	International initiative focusing on better communication between science, industry, and education. Includes so called Real Life Learning Labs of NZE buildings.

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5. Regional Implementation of Roadmap (roll-out plan) Czech Republic

Roll-out plan for DEMAND-SIDE INNOVATION POLICIES on PEB in the Czech Republic						
Implementation of Demand-Side policy Instruments (DSI)	2015	2016	2017	2018	2019	Regional Output by 2020
DSI1 Two-stage Incentive Programme	Negotiation with relevant authorities	Assessment of regional PEB potential	Designing and preparation of the incentive programme / Synergies with EU funding	Monitoring system / Adjusting existing or already planned supportive schemes (bonuses)	Development of regional PEB strategies	Regional PEB strategies and commitment for implementation of at least 10 demo projects
DSI2 Multistage Voucher Scheme	Individual steps planning / identification of key actors	Monitoring of relevant services and consultancy services / setting up a joint platform	Involvement of relevant authorities / Design of voucher scheme 1 st and 2 nd stage	1 st stage voucher scheme launch / evaluation / monitoring	2 nd stage voucher scheme launch / evaluation / monitoring	21 PEB related projects funded (14 regions / 7 projects)
DSI3 Prefeb PEB lab		Initiation of communication with key actors / R&D facilities	Definition of a special topic on the development of locally adapted, prefabricated PEB model houses in the relevant funding programmes.	Involvement of demand-side target groups and the elaboration of communication plans objectives and set of monitoring indicators.	Design of national / regional calls for funding PEB prefabrication concepts	Set of ready-to-launch calls for PEB model houses
DSI4 Virtual PEB Guidance tour		Identification of demand-side actors / potential builders / owners	Definition of Virtual PEB guidance tour tools / activities for different types of	Dissemination plan for DSI4 in order to be implemented in overall campaign	Launch of the information platform (publications,	Complex information knowledge base on PEB in operation

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		of PEBs	target groups		website, community, network of PEB owners / operators)	
DSI5 PEB topics in education			Draft educational concept	Pilot testing of the concept	Assessment of the results / decision on the level of integration	Education programmes on PEB-related topics
DSI6 Financing Tools for PEB projects				Selection of proper financial instruments with regard to national PEB strategies	Elaboration of methodology for PEB assessment from the bank risk management point of view	Draft financing tools proposal and recommendation for implementation