



Energy poverty and the Czech Republic

Catching the opportunity

Ljubljana

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Founding partners



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Housing in the Czech Republic

- 10,4m people
- **55 % in multi-family houses**, 43 % in single-family houses
 - 75 % live in owner occupied
 - 40 % served by district heating
- Average age of buildings: 52y (MFH)
49y (SFH)
- Low energy prices
vs. high share of income on energy expenses



SINGLE FAMILY
HOUSES

1,554,794



APARTMENT
BUILDINGS

211,252

= 2,416,033 FLATS

TOTAL 350,000,000 m²

Czech system of social housing

- No definition of energy poverty in Czech legislation
- **652 000 people** receive state financial aid on housing
- Some **EUR 455m in 2015**
 - 60% on energy expenses

Year	Expenses (bn CZK)	Number of recipients (households)
2012	7,4	206 071
2013	10,2	259 543
2014	12,1	297 021
2015	12,3	291 431

A red arrow points from the 2012 expense value (7,4) to the 2015 expense value (12,3), with the text "+66 %" written in red next to the arrow.

Bad experience – social housing as a business

- Many subjects providing „social“ housing exploit the generous system
- The level of support does not reflect the quality of housing provided
- Results:
 - Significant increase in state expenses in last 4 years
 - 60 % of ppl receiving state aid live in lodging houses in substandard conditions
 - Socially excluded areas (ghettos) were formed




New Social Housing Bill (proposal)

- Municipalities to be responsible for providing social housing
 - Using own or contracted apartments
 - Great opportunity to **set minimal standards**
- Our aim:
 - **to involve energy efficiency standards into the minimal requirements**
 - **to shape conditions of the state support in favour of higher energy efficiency standards**
- To be decided this year (?)



Situation in Czech Republic

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	 Single family houses	 Apartment buildings	 Public buildings	 Commercial buildings
Renovation in Prague	New green savings programme	New green savings programme	OP Environment OP Prague	
Renovation out of Prague	New green savings programme	Integrated Regional OP	OP Environment	OP Entrepreneurship and Innovation for Competitiveness
New building	New green savings programme	New green savings programme	OP Environment	OP Entrepreneurship and Innovation for Competitiveness
Replacing sources	OP Environment Priority Axis 2 New green savings programme	Integrated Regional OP New green savings programme	OP Environment	OP Entrepreneurship and Innovation for Competitiveness
Others		Panel Jessica	Efekt	Efekt

Subsidy programmes in the Czech Republic

- Fragmented (6+ programmes)
 - Type of the building
 - Type of the owner
 - Type of the measure (renovation/construction/source replacement)
 - Location
 - Various responsible institutions
 - Different conditions and level of support
- Significantly varying results



The New Green Savings

- The most popular programme – **continuous** call (2015-2021)
- Supporting SFHs (+MFHs in Prague) **renovation and construction** with subsidies. For both individual and legal entities
- Several **levels of support depending on depth of renovation** or quality of new construction
 - Supporting also single measures (e.g. windows replacement)
- Subsidies also for the use of RES, greenroofs or wastewater heat recovery
- **Allocation: up to CZK 20bn** depending on EU-ETS revenues



**Nová
zelená
úsporám**

The New Green Savings – closer look

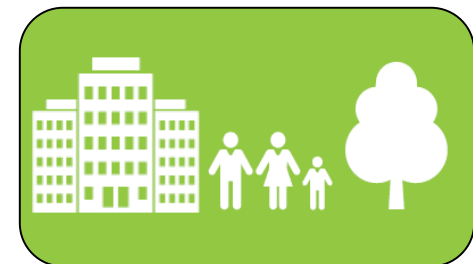
- Since 2014 more than **EUR 150m (CZK 4bn)**
- 18357 projects -> **on average 8400 EUR per project**
 - 32 % shallow renovation, 46 % complex deep renovation,
- Subsidy levels depending on the depth of renovation:
 - Covering **on average 30-40 % of eligible costs**
 - Envelope insulation: EUR 18-30,- /m²
 - Windows: EUR 78-140,- /m²
 - Floors: EUR 26-45,- /m²
 - Ceiling: EUR 12-21,- /m²
 - Boilers, heat-pumps, solar panels:
up to EUR 3700,-



**Nová
zelená
úsporám**

Integrated Regional Operational Programme

- SO 2.5: Improving energy performance in the housing sector
- Supporting MFHs renovation and construction
- Popular among municipalities (23%) and condominiums (66%)
- Current round (2016-2017):
 - Allocation EUR 117m
 - 350 applications, subsidy EUR 25,5m -> on average EUR 72 000 per project
 - Covering **up to 40% of eligible costs** depending on the depth of renovation
- Total expectations: 2000 MFHs renovations
over 28 000 units



Operational Programme Environment (2014-2020)

- SO 2.1: To reduce emissions from domestic heating contributing to population's exposure to excessive concentrations of pollutants
- **Subsidy for the replacement of obsolete solid fuel combustion facilities** with new environmentally friendly methods of heating
- Allocation: 3x EUR 110m (CZK 3bn)
 - In 2016 – 25 000 applicants
 - Covering 70-80% of costs up to EUR 5500



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Example

- Partial SFH reno (envelope)
- Total costs: EUR 14 000
- Subsidy: 40% + project
- Savings:
62 %



Konstrukce	Původní stav	Zateplení Fasády		Zateplení Střechy		Zateplení Střechy + Fasády	
		Tloušťka izolace (mm)	U (W/m2K)	Tloušťka izolace (mm)	U (W/m2K)	Tloušťka izolace (mm)	U (W/m2K)
Fasáda	1,37	180 mm FKD S	0,18			180 mm FKD S	0,18
Střecha	0,31			200 mm Unifit 032	0,14	200 mm Unifit 032	0,14
Měrná potřeba tepla na vytápění	124 kWh/m2a	Úspora 29%	87 kWh/m2a	Úspora 26%	92 kWh/m2a	Úspora 62%	47 kWh/m2a
Náklady na úsporná opatření	-	190 000 Kč		198 000 Kč		388 000 Kč	
Dotace	-	Dotace 56 700 Kč + 8 500 Kč dotace na projekt		Dotace 59 400 Kč + 8 900 Kč dotace na projekt		Dotace 155 000 Kč + 23 000 Kč dotace na projekt	



Thank you for attention!

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Chance for Buildings is an alliance by leading trade associations that supports energy efficient construction. It brings together **Czech Green Building Council**, **Passive House Centre**, **Mineral Insulation Manufacturers Association**, **EPS Association** and **Energy Service Providers Association**. It represents over 300 companies across the entire value chain of building construction and renovation. Chance for Buildings aspires to reap the crucial societal benefits of energy efficient buildings. We advocate for favourable policy and economic incentives, including proper implementation of relevant EU directives in the Czech Republic.

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- Aim to build and strengthen Central and Eastern Europe's energy efficiency community
- June 2018

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