Long-Term Renovation Strategy and building renovation programs in the Czech Republic

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Outline

- Introduction
- Long Term Renovation Strategy
 - Czech Republic case study
 - Parameters of designed scenarios
 - Survey
 - Barriers
- Financial measures
 - Lessons learned



Introduction

- Influenced by EU membership
- EU energy and climate targets
 - Pressure to increase energy efficiency tightening building performance rules

Long Term Renovation Strategy

- Supporting renovation of national building stock
- Contains:
 - overview of the national building stock
 - cost-effective approaches towards renovation
 - overview of policies and actions to target the worst performing segments
 - roadmap including indicative milestones for 2030, 2040 and 2050



Czech Republic – case study

- Number of apartment buildings approximately 211 000
- Data shows higher renovation rate than EU yearly average of 1 %
 - Single family houses 1,4 %
 - Multiapartment buildings 0,79 %
 - Public and commercial buildings 1,4 %
- Strategy defines 3 scenarios
 - Business as usual (BAU)
 - Optimal
 - Hypothetical

Parameters of scenarios -

| Category | | BAU | Optimal | Hypothetical |
|----------------------------|---------------------|-------------------------|----------------------|----------------------|
| New construction | | | | |
| Multiapartment buildings | | 0,46 % | 0,46 % | 0,46 % |
| Annual rate of renovations | | | | |
| Multiapartment buildings | | 0,79 % | 0,79 % | 2,00 % |
| Depth of renovations (DR) | Depth of renovation | Maintaining existing DR | DR increased by 2025 | DR increased by 2030 |
| Multiapartment buildings | Shallow | 31 % | 20 % | 5 % |
| | Moderate | 50 % | 40 % | 10 % |
| | Deep | 19 % | 40 % | 85 % |

| Chosen scenario - Optimal | 2020 | 2030 | 2040 | 2050 |
|---|------|------|------|------|
| | | | | |
| final energy consumption in the given year [PJ] | | | | |
| Multiapartment buildings | 88 | 83 | 78 | 73 |
| cumulative investment costs [CZK billion] | | | | |
| Multiapartment buildings | 13 | 45 | 76 | 105 |

Survey – motivations for renovation

Survey findings - multiapartment buildings

- Since 2010, more than two thirds of apartment buildings have undergone at least some renovation of the common parts of the apartment building
- Common motivations for renovation:
 - House maintenance or an acute solution of an issue, i.e. the technical condition of the building
 - Improvement of the internal environment
 - Energy saving costs
- Availability of a subsidy was not a significant factor for renovation



Survey – owners and barriers

Cooperative houses

- comprehensive approach, renovate often
 - More measures are implemented at once (complete building envelope windows, cladding, roof)

Individual owners

- renovate sporadically
- significantly lower ratio of the use of commercial loans
 - low motivation

Other categories

- gradual renovations
- vast majority of buildings are renovated from their own resources
- subsidy was used only in 12–20% of cases, less than half use a commercial loan to co-finance

Overcoming barriers – policies and measures

Focus

- increasing the quality of renovations and their complexity
- finding a motivating factor for renovations

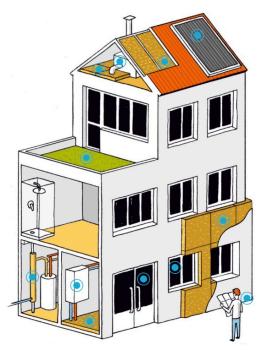


Introduce appropriate instruments

- Financing
- Legislation
- Awareness raising and education

Support schemes for multiapartment buildings

- Integrated Regional Operational Program <u>financial</u> grant
 - 40 % subsidy energy savings at least 40 % and classification B,
 - 30 % subsidy energy savings at least 20 %
- New Green Savings financial grant
 - multiple measures 40 % of the total eligible costs
 - single measure 30 % of the total eligible costs
- **Program Panel** <u>soft loan</u>
 - up to 90% of eligible costs
 - interest rate 0,50 % p.a.



Support schemes for multiapartment buildings

- Ensures deeper renovation
- Incentives for broad range of measures
- Support for technical assistance –
 preparation of technical
 documentation and energy
 assessment

| Programme | Projects implemented, 2014-2020 | | | | | |
|-----------|---------------------------------|---------------------------|---------------------------------|------------------------------|--|--|
| | Number | Energy savings (TJ) | Eligible costs (mil. CZK) | Amount of subsidy (mil. CZK) | | |
| IROP | 1 917 | 1 217 | 12 424 | 4 056 | | |
| NGS | 542 | 363 | 2 388 | 462 | | |
| Panel | 555 | 158 | 2 632 | 2 112 | | |







Lessons learned

- Positive growth of number of projects within support schemes
 - Streamlining criteria and tackling administrative burdens
 - Bigger focus on awareness raising benefits of energy efficient buildings and existing support schemes
 - Stable conditions and criteria
 - Gathering feedback from applicants (surveys etc.)
- Increase of project costs influencing the yield because of financial allocations of respective programmes
- Project preparation takes 4-times longer than implementation need for technical assistance
- Flexible legal framework for building owners associations to prevent a situation in which one apartment owner blocks the whole renovation

Thank you for your attention



