IROP - problems of thermal insulation of apartment buildings

JASPERS Networking Platform Workshop on Energy Efficiency in Housing and Public buildings

Prague, October 2, 2019

Aleš Pekárek
OVERVIEW OF AID SCHEMES - Energy savings

Blue - financed from European sources Green - financed from national sources

Nová zelená úsporám (Státní fond životního prostředí ČR)

Operační program Životní prostředí „Kotlíkové dotace“

Program EFEKT (Ministerstvo průmyslu a obchodu)

Nová zelená úsporám (Státní fond životního prostředí ČR)
(for owners of apartment buildings in the City of Prague)

Integrovaný regionální operační program (IROP)

Program Panel 2013+ (Státní fond rozvoje bydlení)
(aid in the form of a loan)

Operační program Podnikání a inovace pro konkurenceschopnost

Operační program Životní prostředí

Operační program Praha - půl růstu České republiky

Program EFEKT (Ministerstvo průmyslu a obchodu)
INTEGRATED REGIONAL OPERATIONAL PROGRAMME

- Total ERDF allocation: **EUR 4.76 billion**
- IROP Managing Authority - MoRD, Department of Operational Programmes Management
- Intermediate body: Center for Regional Development of the CR, ITI IB
- Allocation for reducing the energy intensity of apartment buildings (SO 2.5) from ERDF: approx. CZK 9.5 billion
Statistics in SO 2.5 as of 29.08.2019

- Total submitted projects: 2337 pcs
- Total approved projects: 1733 pcs worth CZK 3.7 billion from ERDF (TEE = CZK 11.4 billion)
- Total projects reimbursed: 1031 pcs worth CZK 1.9 billion from the ERDF
BASIC INFORMATION ON CALL 78

- **Announcement of the call:** 12.01.2018
- **Receipt of applications:** 02.02.2018 till 29.11.2019
- **Ongoing call** = appraisal of grant applications when they are submitted
  - no substantive appraisal
  - repeated submission
- **Date of project implementation start:** 01.01.2014 at the earliest
  - restriction - block exemption = the incentive effect is met
- **Project completion date:** till 30.09.2021
  - the implementation of the project must not be completed before submitting the grant application
- **Territory of implementation:** territory of the Czech Republic outside the City of Prague
- **Form of aid:** ex-post financing
- **Minimum amount of total eligible expenditure:** CZK 300 000
- **Maximum amount of total eligible expenditure:** CZK 90 000 000
IMPORTANT CONDITIONS OF THE CALL

ELIGIBLE APPLICANTS

• owners of apartment buildings
  
  Natural persons non-entrepreneurs are excluded.
  A natural person entrepreneur is a self-employed person or a natural person who rents out the residential property.

• associations of flat owners (SVJ)

• housing cooperatives as managers of apartment buildings pursuant to Act No 311/2013 Coll., on the transfer of ownership rights to units and group family houses of housing cooperatives
  
  - If a SVJ has been established, the applicant shall be the SVJ
  - A housing co-operative cannot be an applicant for an apartment building which it manages against remuneration but does not own.
IMPORTANT CONDITIONS OF THE CALL

SUBJECT OF SUPPORT

• The call applies only to apartment buildings, i.e. buildings which comply with the definition of an apartment building under letter (a) of par. 2, Decree No 501/2016 Coll., on general requirements for land use.

  = more than half of the floor area meets the requirements for permanent housing and is intended for that purpose (no number of housing units required)

• In the Land Register - an apartment building or residential building

In the event that establishments or commercial premises are also part of the apartment building, the costs incurred for such premises are eligible only if they are part of a comprehensive renovation of the apartment building as a whole.
Supported activities = main activities + secondary activities
MINIMUM 85% of TEE for main activities

Overall or partial energy-saving renovations of apartment buildings:

- **improvement of thermal parameters of the building structures** of apartment buildings (heat insulation of building envelopes, ceilings, floors, roofs, interior walls, and related expenses - the cost of scaffolding, construction lifts, cleaning of the surface under the insulation system, tin components of roofs, grids on ventilation openings; **replacement of windows and doors** and related expenses - costs of exterior window sills, removal of the original windows and doors, resizing the aperture, masonry installation and finish; **replacement of the roof covering**)

- installation of **exterior sun-shading elements**

- installation of **a forced ventilation system** with heat recovery

- replacement of the **existing main heat source**:
  - **burning fossil fuels for**: gas condensing boiler, heat pump, CHP unit using renewable energy sources or natural gas
  - **burning solid fossil fuels for**: biomass boiler
SUPPORTED ACTIVITIES

MAIN

Supported activities = main activities + secondary activities

MINIMUM 85% of TEE for main activities

Overall or partial energy-saving renovations of apartment buildings:

• installation of a new heat source (gas condensing boiler, biomass boiler or heat pump) and construction of central heating in houses where the individual flats were previously heated by their own heat sources
• installation of solar photovoltaic systems
• installation of solar thermal collectors
• connection of the apartment building to a system of heat supply

THE SUPPORT IS NOT INTENDED FOR

• extensions of apartment buildings
• a replacement of the heating source, which would lead to disconnection from the thermal energy supply system or to replacing the energy supply from that system - does not apply to solar thermal collectors
# SUPPORTED ACTIVITIES

## MAIN - REPLACEMENT OF THE SOURCE

### - ORIGINAL HEAT SOURCE -

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>Solid fossil fuel boiler</th>
<th>Liquid fossil fuel boiler</th>
<th>Natural gas boiler</th>
<th>Heat pump</th>
<th>Biomass boiler</th>
<th>Electric boiler, el. heater</th>
<th>Combined heat and power generation unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler - SOLID FF</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Boiler - LIQUID FF</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Boiler - NATURAL GAS</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Gas heat pump</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Electric heat pump</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Biomass boiler</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Electric boiler, el. heater</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Combined heat and power unit - natural gas</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Combined heat and power unit - biomass</td>
<td>YES</td>
<td>X</td>
<td>YES</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
SUPPORTED ACTIVITIES
SECONDARY

Supported activities = main activities + secondary activities
MAXIMUM 15% of TEE for secondary activities

• Construction security (author’s supervision, occupational health and safety, technical supervision of the investor)
• design documentation
• services directly related to implementation
  • hydraulic test of the heating system
  • regulation/ modernization of the heating system and domestic hot water distribution
  • energy assessment and calculation of indicators
  • background documents for the assessment
  • preparation and implementation of tendering and selection procedures
• mandatory publicity (Chapter 13.2 of the General Rules)
  – website (if the applicant has one)
  – temporary billboard - construction work (support > EUR 500 000)
  – poster (min. size A3)
    – to be placed on a visible spot in the place of the project implementation after the project implementation commences; if it cannot be located at the project implementation site, it will be located at the applicant's headquarters
  – permanent memorial plaque - purchase of tangible assets, construction work (support > EUR 500 000)
INELIGIBLE EXPENDITURE

Common to all aid schemes (State aid and non-State aid)
- expenditure on extensions of buildings;
- expenditure on secondary project activities, exceeding 15% of the eligible expenditure
- expenditure on the preparation and drawing up of grant applications and expenditure on project management and administration
- contracts concluded with consultants/intermediaries where payment is defined as a percentage of the total project cost;
- budget reserve;
- optional publicity expenditure
- insurance

STATE AID "block exemption" (GBER)
- costs not directly linked to achieving a higher level of energy efficiency (construction site equipment, dryers, antennas, gutter pavements around the house, mosquito nets, interior wall painting, loggia glazing, landfill charges, interior window sills)
### SUPPORT LEVELS

<table>
<thead>
<tr>
<th>Support level</th>
<th>Subsidy - ERDF</th>
<th>Subsidy - state budget*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thermal insulation / replacement of windows and doors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>saving of at least 40% of the total energy supplied</td>
<td>40 %</td>
</tr>
<tr>
<td></td>
<td>energy class of total energy supplied: <strong>B or better</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compliance with the requirement of <strong>cost-optimal level pursuant to letter a) or b) of paragraph 2, Section 6 of Decree No 78/2013 Coll., on the energy performance of buildings</strong></td>
<td></td>
</tr>
<tr>
<td>1b</td>
<td>saving of at least 30% of the total energy supplied</td>
<td></td>
</tr>
<tr>
<td></td>
<td>energy class of total energy supplied: <strong>C or better</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compliance with the requirement of <strong>cost-optimal level pursuant to letter a) or b) of paragraph 2, Section 6 of Decree No 78/2013 Coll., on the energy performance of buildings</strong></td>
<td></td>
</tr>
<tr>
<td>1c</td>
<td>saving of at least 20% of the total energy supplied</td>
<td></td>
</tr>
<tr>
<td></td>
<td>achievement of <strong>0.95 times the recommended value of the heat transfer coefficient</strong> for the individual heat insulated structures or replaced windows/doors according to Czech National Standard ČSN 73 0540-2 or better</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>the individual insulated structures or replaced windows/doors must meet the <strong>required value of the heat transfer coefficient</strong> ( U_{N,20} ) according to CSN 73 0540-2 (CULTURAL MONUMENTS, MONUMENT CONSERVATION AREAS, MONUMENT ZONES)</td>
<td></td>
</tr>
</tbody>
</table>

**Installation of technological systems without simultaneous thermal insulation / replacement of windows/doors**

*The whole building must be a cultural monument. It is not sufficient that only some elements are listed.*
SUPPORT LEVELS

BASIS FOR DETERMINING THE SUPPORT LEVEL

1. Type of main activity
   • Installation of technology - Support Level 3
   • Thermal insulation and/or replacement of windows and doors =>

2. Cultural monument, conservation area, monument zone
   • YES - Support Level 2
   • NO =>

3. Information given in the Energy Performance Certificate (EPC) before and after implementation
   • amount of savings in total energy supplied (comparison of EPC before and EPC after implementation)
   • energy class of total energy supplied (EPC after implementation)
   • Compliance with the requirement of cost-optimal level pursuant to letter a) or b) of paragraph 2,

In the case of combining installation of technological systems and thermal insulation of the building envelope and/or replacement of windows/doors according to point 1a), the applicant is entitled to support according to 1a) for all supported measures that are part of the grant application.

In one grant application:
• it is possible to support the improvement of energy performance of multiple buildings.
• it is not possible to support apartment buildings with different percentages of support.
### STATE AID

= the choice depends on the applicant

<table>
<thead>
<tr>
<th>Applicant</th>
<th>STATE AID Block exemption (GBER)</th>
<th>STATE AID Support de minimis</th>
<th>WITHOUT STATE AID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Limitations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The project must not be completed</td>
<td></td>
<td>- The project must not be completed</td>
<td>\textit{SVJ}, which does not rent common premises</td>
</tr>
<tr>
<td>- The incentive effect is pursued - selection procedure - it must not be an irreversible investment</td>
<td></td>
<td>- Maximum amount of support - EUR 200 000</td>
<td>\textit{Natural persons non-entrepreneurs} not renting flats or non-residential premises in the building that is the subject of the grant application</td>
</tr>
<tr>
<td>- Limitations on eligible expenditure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
<td></td>
<td>Total expenditure on a project aimed at reducing energy intensity of apartment buildings</td>
<td>Total expenditure on a project aimed at reducing energy intensity of apartment buildings</td>
</tr>
</tbody>
</table>

**Benefit**

Total expenditure on a project aimed at reducing energy intensity of apartment buildings

| **Total expenditure** on a project aimed at reducing energy intensity of apartment buildings | **Total expenditure** on a project aimed at reducing energy intensity of apartment buildings |

- SVJ, which does not rent common premises
- Natural persons non-entrepreneurs not renting flats or non-residential premises in the building that is the subject of the grant application

---

**Limitations**

- The project must not be completed
- The incentive effect is pursued - selection procedure - it must not be an irreversible investment
- Limitations on eligible expenditure

**Advantages**

Total expenditure on a project aimed at reducing energy intensity of apartment buildings
SUCCESSFULLY IMPLEMENTED PROJECTS

Pilsen - Doubravka
Applicant: SVJ
Grant: CZK 1.08 million

Pilsen - Skvrňany
Applicant: SVJ
Grant: CZK 1.40 million

Touškov
Applicant: SVJ
Grant: CZK 1.08 million
Campaign “Thermal insulation” (25.02.-07.04.2019)

• The TV campaign included **1,200 TV spots**, with a total audience of **114 million views**.

• The radio campaign contained **120 spots** on Radio Impuls.

• The advertising in cinemas was seen by more than **385,000 viewers**.

• The press campaign contained **49 advertisements** in supplements to the most widely read daily newspaper.
“It can be insulated” website

- The website www.jdetozepteplit.cz launched together with the campaign was visited by **231 618 users**, of which:
  - 205 236 came from banners and videos within the campaign,
  - 10 296 came from the Google search engine,
  - 1 183 came from the Seznam search engine,
  - 6 196 came from social networks,
  - 7 970 came directly to the site by entering the address,
  - **29 062 users** returned to the site after their first visit.
Průměr EFRR projektů SC 2.5 dle čtvrtletí registrace
Now the problems 😊

- Inexperienced (first-time) applicants
- Small projects vs huge allocation
- Owners of apartment buildings have no need to save (cheap Czech energy compared to other countries)
- Relatively sophisticated call
Thank you for your attention