

## Title

**Green Savings and New Green Savings – governmental subsidy schemes**

## Short description

Green Savings (Zelená úsporám) and New Green Savings (Nová zelená úsporám) are governmental investment subsidy schemes focused on energy efficiency and renewable energy. The programmes subsidise installations of heating system utilising renewable energy sources in new buildings and in refurbished houses as well as energy savings in these houses. Supported measures include insulation of family houses and multiple-dwelling houses, replacement of old solid fuel-based heating with low-emission biomass-fired boilers and efficient heat pumps, installation of solar-thermal collectors in new energy efficient buildings, and construction of new houses to the passive energy standard. The Green Savings programme (2009-2011) was financed by proceeds from sale of tradable units (under Kyoto protocol), New Green Savings programme (from 2013 to date) is financed by proceeds from auctioning of EU emission allowances. The original Green Savings programme funded about 73,000 projects in households and achieved emission reduction of about 710 kt CO<sub>2</sub> per year – around 60% originating from energy savings and 40% from renewable sources deployment.

## Topic

Living – Energy efficient housing

## Characteristics (type, level)

National Intervention

## Country/Countries of implementation

Czech Republic

## Aims and Objectives

The key objective of the Green Savings Programme was to subsidize high-quality insulation of family houses and apartment buildings, and construction of very low-energy (passive) houses. The replacement of environmentally unfriendly heating for low-emission biomass boilers and heat pumps as well as the installations of low-emission sources into new buildings and solar thermal systems utilization were other purposes of the Programme.

## Target Group

Households

## Status

Implemented on a continuous basis (with a 2 years break between Green Savings programme and New Green Savings programme)

## Start and Completion dates

Green Savings programme (2009-2011)

New Green Savings programme (from 2013 until present)

## Lifestyle and Behavior Change

These governmental programmes aim at encouraging people to increase utilization of renewable sources for heating and to undertake energy saving measures. Relatively generous subsidy intensities make it easier for households to modify their energy use towards consuming less energy and with less environmental impact.

### Effects on:

<b>Health and Wellbeing</b>	The programmes have direct effects on wellbeing of households by reducing their energy need, risk of fuel poverty, and exposure to indoor pollution generated by old heating systems.
<b>Vulnerable populations</b>	The programme effectively reduces fuel poverty risk and improves home livability, but social and/or economic status have not been part of evaluation of eligibility for financial support from the programme.
<b>Environment</b>	Effects on the environment are the key indicators of both programmes. Total effects in terms of reduction in CO <sub>2</sub> emissions, volume of energy savings, and installed capacity of renewable energy heating system are regularly assessed and reported.

### Initiated and/or implemented by

Both programmes were initiated by Ministry of Environment and implemented through State Environment Fund. The original Green Savings programme was designed as a Czech CO<sub>2</sub> emission reduction commitment under the Kyoto protocol to UNFCCC.

### Stakeholders and sectors involved

- Ministry of Environment and State Environment Fund – initiated and implemented both programmes, set rules for applications, evaluate and approve application and control fulfilment of subsidies granted to individual households;
- construction sector, producers of construction materials, PV panels, heat pumps, boilers etc. – those firms were obliged to enlist themselves and their products and technologies on a white list in order to be eligible to carry out or be used for subsidized activities;
- building designers/engineers, energy auditors – they helped applicants to prepare projects accompanying applications for a subsidy from the programme.

### Financial support

Green Savings programme was funded from sale of excess Kyoto permits (AUAs), and subsidy intensity was in a range of 60-65% of eligible costs. New Green Savings programme is funded from revenues from auctions of emission permits (EUAs) in EU Emission Trading Scheme, and the subsidy intensity was lowered to 30-50% of eligible costs.

### Evidence-base

Some evidence base was gathered before the original Green Savings programme was initiated, but the programme was prepared in a relative haste.

### Main activities

Subsidies to households for energy savings in heating (full or partial thermal insulation), construction of new residential houses to the passive energy standard, switch to renewable energy sources for heating and hot water preparation, and combinations of these measures.

### Evaluation

Evaluations were conducted by analysis of database of applications by external evaluators. The analysis was restricted to fulfilment of technical indicators - CO<sub>2</sub> emission savings and/or energy savings achieved. Ex-post analysis of applicants' satisfaction with subsidy administration in Green Savings programme was carried out in 2016.

### Main results

The original Green Savings programme achieved substantial emission reduction estimated at about 710 kilotonnes CO<sub>2</sub> per year. Around 60% of this reduction comes from energy savings and 40% from renewable sources deployment.

### Key success factors and barriers

In the beginning relatively strict and demanding requirements on project documentation and technical assessment, the need to use only enlisted construction materials (product and technologies) and qualified suppliers slowed the pace of submission of applications. Once the rules were clarified, the generous subsidy intensity resulted in huge increase of application, and in spite of large volume of funds allocated (approx. € 0.7 billion by far the largest subsidy programme in the Czech Rep. targeted to households), the available funding was drained in September 2010. For the New Green Savings programme the subsidy intensity was lowered and also budget was reduced in part due to lower than expected revenues from sales of EU emission permits.

### INHERIT Perspective

This initiative has been chosen for inclusion in INHERIT database because of it improves both environment and health through enabling households to heat their homes with less energy and with renewable sources, improving indoor air quality as a consequence. It creates an opportunity to change the environmental STATE, reduce health consequences of insufficient home temperatures and from harmful emissions from local heating leading to poor indoor and local outdoor air quality (EXPOSURE).

### More information

- website: Green Savings programme - <http://www.zelenausporam.cz>, New Green Savings programme - <http://www.novazelenausporam.cz/>
- Green Savings Programme Annual Reports (2009-2012) available from <http://www.zelenausporam.cz/sekce/628/vyrocnizpravy/>
- Karásek, J., & Pavlica, J. (2016). Green Investment Scheme: Experience and results in the Czech Republic. *Energy Policy*, 90, 121–130. <http://doi.org/10.1016/j.enpol.2015.12.020>

## Contact

State Environmental Fund of the Czech Republic  
Olbrachtova 2006/9, 140 00 Praha 4  
Tel.: +420 267 994 300  
email: [dotazy@sfzp.cz](mailto:dotazy@sfzp.cz)