Energy efficiency financing models – case: Hungary

Deliverable D.T 2.3.2

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1. INTRODUCTION

As any activity, energy renovation has its related costs, which vary according to the depth of the refurbishment, i.e. number and complexity of implemented energy efficiency (EE) measures. Therefore, any decision on energy renovation of a building must carefully evaluate these costs and ensure financing, in order to reap the benefits after the implementation.

The most usually utilised financing models for EE were presented and discussed in the **Deliverable D.T2.2.1 - Collection of existing financing mechanisms**. They include: own funding, loan financing, ESCO model (Energy Performance Cintracting – EPC), public-private partnership (PPP), grant schemes or some combination of the beforementioned models. All financing models may be compared based on several important criteria as demonstrated in the Table below. There is no universally best solution, but for each particular situation (country, region, building) an optimal solution should be tailor-made.

TableBłąd! W dokumencie nie ma tekstu o podanym stylu. **1 - Comparative analysis of considered alternative models**

Criteria/ Model	Own financing	Loan financing	Grants	ESCO model	PPP model
Neutral impact on government debt	☺	☹	☺	😐	☺
Administrative procedure complexity	☺	😐	😐	😐	☹
Guarantee of savings / service standard	☹	☹	😐	☺	☺
Capacities and capabilities of the public bodies to implement the model	☺	😐	😐	☹	☹
Estimated multiplier effect	☹	☹	😐	☺	☺
Projects for which the model is appropriate	Simple EE measures with short pay-back periods	Simpler EE measures with shorter pay-back periods	More complex projects, with longer pay-back periods	Highly complex projects, with moderate pay-back periods (up to 10 years)	Highly complex projects, usually with new buildings, long-term

Usually, energy efficiency projects in public buildings combine two financing models. Rarely, more than two financing models are used. Research of usual practices in the Project Partner countries showed that dominantly grants (if available) are combined with own financing.

Recently, with the availability of EU structural and investment funds for energy efficiency across the MS, the blending of such funds with other financing models becomes increasingly interesting. The blending refers to combination of EU grants with other financing mechanism such as loans or ESCO/PPP model.

The deliverables D.T2.2.1 presented available financing models in each participating country and, based on the Project partners' feedback, provided a comparative analysis of availability, current usage and planned usage of different financing models.

This document builds upon the previous data gathered on and analyses of available and desirable financing models and provideds the list of all available incentives and financing mechanisms for energy efficiency actions in Hungary.

2. AVAILABLE INCENTIVES AND FINANCING MECHANISMS IN HUNGARY

2.1. Overview of financing mechanisms for EE

Hungary has quite limited selection of financing mechanisms for EE projects in schools. Schools are owned by local governemnts, while utility bills are paid by mainatnace organisations. Funds for EE projects theroetically may be planned in the budgets of mainatance organisations, but this was not the case as the priorty was given to the use of available EU funding rather than using own funds.

However, the funding allocated for this purpose for the period 2014 -2020 from EU funds has already been used in full. Other grant schemes from national sources do not exist.

Legislation does not allow borrowing for maintenance organizations.

ESCO market is developed and the model is used since 2005 in some municipalities. PPP model ois available but used dominatly for construction of university colleges and not for energy renovation. There are no plans to use ESCO or PPP model, while the priorty is given to the use of EU funds.

Table 2 - Overview of financing mechanisms for EE projects in schools

Criteria/ Model	Own financing	Loan financing	Grants	ESCO model	PPP model
Availability	-	-	√	√	√
Previous and current usage	-	-	√	√	-
Planned usage	-	-	√	-	-

In table below the sources for more inromation on financing mechanisms for EE are provided.

Table 3 - Overview of sources for more information about financing mechanisims for EE

Information	Source
General information about EE	Hungarian Energy Efficiency Institute (MEHI) https://mehi.hu/en
Information about loan financing	Hungarian Developemnt Bank https://www.mfb.hu/
Information about ESCO financing	ESCO financing cooperation programme http://www.norvegalap.hu/az-esco-szerepe-es-jelentosege-a-megujulo-energia-es-energiahatekonysagi-beruhazasok-finanszirozasaban-a-klimavaltozas-hatasainak-csokkenteseben
Information about PPP financing	Hungarian Developemnt Bank https://www.mfb.hu/

2.2. List of incentives for EE

Analysis of energy efficiency improvements' costs and benefits in the selected schools demonstared that EE projects need high grants in order to demonstrate financial feasibility. It is, therefore, very important to ensure incentives in form of grants as well as to inform potential users on their existance and terms and conditions for their utilisation.

An overview of available incentives for EE projects in schools in Hungary is given in Table below.

Table 4 - Overview of incentives and financing mechanisms for EE projects in schoolsin Hungary

Criteria/ Model	Grant programme 1	Grant programme 2
Name of institution	The Government of Hungary	The Government of Hungary
Name and description of grant	Environmental and Energy Efficiency Operational Program - budget building tenders for building energy development	Environmental and Energy Efficiency Operational Program -building energy developments in public buildings
Max. percentage of grant (%)	100%	100%
Max. value of grant (€)	806.451 €	35.000 €
Availability	one time	one time
Legislative reference	European Regional Development Fund	European Regional Development Fund
Possible combination with other incetives/financing mechanisms	NO	NO
More info	https://www.palyazat.gov.hu/	https://www.palyazat.gov.hu/

3. ASSESSMENT OF THE NEED FOR INCENTIVES FOR EE PROJECTS

The feasibility of EE projects depends on both technical potentials of applied mesures in terms of energy savings and on the conditions of financing mechanisms available for their support. The financing gap occurs when the investment in EE cannot be paid off from savings on energy costs. The incentives in forms of grants are needed for glosing the financing gap. The assessment of the need for co-financing in EE projects in participating schools in Hungary is perfomed with assumpotions shown in the Table below.

Table 5 - Overview of incentives for EE projects in schools

Criteria/ Model	Value
Interest rate	1,4%
Discount rate	4,0%
Life cycle of EE renovation (years)	25
Administrative, legal and architect cost	5%
Other bank cost	2%
ESCO cost	not relevant
PPP cost	not relevant
Max % of grant available	100%