



European Construction Sector Observatory

Policy measure fact sheet

Estonia

Renovation Loan and Grant Scheme for Apartment Buildings

Thematic Objective 1

January 2017

Implementing body:	Ministry of Economic Affairs and Communications (MoEAC)
Key features & objectives:	A funding scheme to support the renovation of apartment buildings in Estonia. Funding supports energy efficiency improvements in apartment buildings to reduce energy consumption, extend the lifespan of buildings and improve the overall living environment.
Implementation date:	2009–2014 & 2015–2020
Targeted beneficiaries:	Apartment & building owners, apartment and housing associations, construction companies and tradespeople.
Targeted sub-sectors:	Construction & Energy service sectors
Budget (EUR):	EUR 49 million (2009) increased up to EUR 72.6 million in 2013 (total for 2009-2014) EUR 102 million (2015-2020)

In a nutshell

Estonia has 27,000 apartment buildings¹ which house approximately 70% of the population². 60% of the apartment blocks were constructed between 1960 and 1990, and 30% before 1960³. Most of these buildings are rapidly reaching the end of their life and they do not comply with modern building standards. Whilst there is no immediate danger of them falling apart, these buildings are in need of upgrading. Approximately 20% of Estonian apartment buildings suffer from problems related to poor quality, such as high humidity in apartments, and nearly 25% have heating issues⁴.

The average energy consumption per square meter in Estonia is much higher than in other European countries. In Sweden and Finland, for example, average energy consumption is 150 kWh/m²,

whereas in Estonia, average energy consumption is 200-400 kWh/m²⁵.

To confront challenges such as the need to provide support to SMEs, exporters and housing for young families, and to address the poor energy efficiency of the Estonian housing stock, the government set up the Estonian Credit and Guarantee Fund, KredEX, in 2001. KredEX is a national development bank and part of its remit is to provide financial support to incentivise energy efficiency improvements in buildings. Prior to 2009, support was provided in the form of grants. In 2009, the financing model became a revolving fund that combines EU structural funds and national funds to provide long-term low interest loans to apartment building owners, apartment and housing associations and municipalities. The scheme was modelled on the successful German KfW scheme⁶, which provides similar types of loans to finance renovation work, as well as grants. A complementary grant scheme was then launched in 2010.

The loan and grant scheme ran until 2014 and is broadly considered to have been a success by both stakeholders and beneficiaries. The implementation of a national scheme with an open call for applications, and the use of loan and grant financing mechanisms, are key contributing factors to the scheme's success. In 2015, the scheme reopened with additional funding from EU and national sources. The financing options are broadly similar with some minor variations in conditions. Assessments of the first year of operation indicate that the new scheme is continuing the success achieved by the previous scheme. Ongoing areas for improvement include the need to make the scheme more flexible so that operational parameters, eligibility criteria and funding levels can be adjusted as required. This would enable the initiative to be more effective over time.

General description

The Renovation Loan and Grant Scheme aims to incentivise apartment and building owners and apartment or housing

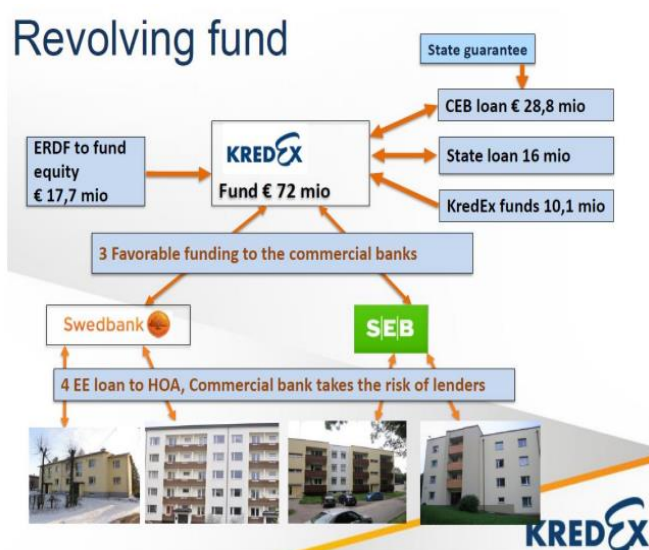
associations to carry out renovation work in their buildings in order to reduce energy consumption and to improve energy efficiency. Renovation Loans provide long-term low interest loans for the financing of renovation work in apartment buildings. Renovation Grants are designed for associations and communities that wish to reconstruct their apartment buildings as completely as possible.

The goal⁷ is to achieve at least 20% savings in apartment buildings of up to 2,000 m² and at least 30% in apartment buildings over 2,000 m².

The scheme was initially set up in June 2009 with a budget of EUR 49 million. Successful results subsequently led the MoEAC to increase its funding to EUR 72.6 million⁸ in 2013. Funding for the scheme is sourced from the European Regional Development Fund (ERDF), the Council of Europe Bank (CEB), the Estonian Government and KredEX. The new scheme running from 2015-2020 will use EUR 102 million sourced from EU Structural Funds.

KredEX acts as the fund manager and is responsible for implementing the scheme. Funding is provided to applicants via two commercial banks – Swedbank (2/3 of the funds) and SEB (1/3 of the funds). These banks were procured to act as financial intermediaries to administer the renovation loan scheme and provide loans to applicants⁹.

Figure 1: Funding and delivery model



Source: The KredEX Revolving Fund, Comparative Study 2014¹⁰

Renovation loans are designed to finance renovation work in apartment buildings to improve the quality of life of their inhabitants. They are intended to support renovation work that has a higher than average risk from a bank's perspective (e.g.: a high share of debtors, the apartment building is located in a low value area or monofunctional settlement, or where investment per m² is notably higher than average) or where a KredEX guarantee is required to insure against the risk of payment difficulties. Credit risk is managed by the lending banks, and the banks can choose to

release loans in up to 8 instalments, releasing each tranche once the previous has been used. A renovation loan recipient is an apartment or building association, apartment owners participating in a community, or apartment owners. An apartment building must be insured during the loan period.

Renovation loans awarded between 2009 and 2014 cover up to 85% of the total renovation costs with a maximum cap of EUR 1.35 million per building. The 2015-2020 scheme covers 75% of the total cost. Beneficiaries are required to finance at least 15% (2009-2014 scheme) or 25% (2015-2020 scheme) of the total costs, including through parallel bank loans with a KredEX guarantee. Loans are offered with a fixed interest rate of 3.5%-4.5% for a period of 10 years. The average rate is 4% for up to 20 years. For the period 2009-2014, the average loan maturity is 17 years¹¹, and monthly loan repayments are typically covered by the savings in heating costs¹².

Renovation grants are designed for associations and communities wishing to renovate their apartment buildings as completely as possible. Grants are only available to support new renovation work. The grant scheme provides three types of grants depending on the size of the apartment building and the energy saving objectives, as shown in table 1. As a percentage of the total renovation costs, applicants may apply for a specific level of grant funding on the condition that the work achieves a certain energy label and percentage of energy savings. The aim is to incentivise more ambitious projects. A higher level of grant funding is available to those projects that aim to achieve greater energy savings and a better energy label. Energy label certification before and after renovation work is part of the energy audit, which is required by the grant scheme.

Table 1: Grant levels and energy saving requirements¹³

GRANT SCHEME 2010-2014		
Level of Grant	Energy Saving Improvement	Energy Label to Achieve ¹⁴
15%	20-30%	E
25%	40%	D
35%	50%	C
GRANT SCHEME 2015-2020		
Level of Grant	Energy Saving Improvement	Energy Label to Achieve
15%	20-30%	E
25%	40%	D
40%	50%	C

The main types of work that are eligible for grant funding are¹⁵:

- Insulation of envelope structures;
- Change of windows and front doors;
- Heating system repair or replacement;
- Ventilation system repair or replacement or installation of a system with heat recirculation;

- Installation of equipment necessary for using renewable energy;
- Lift control or drive unit repair or replacement;
- Design, project management and technical inspection / supervision.

All grant options require renovation projects to improve the indoor climate in apartment buildings. The 25% grant option requires applicants to reconstruct the central heating system of the building, reconstruct and fully insulate the outer walls of the building, replace all windows yet to be replaced at the beginning of the project with triple glazed energy-efficient windows, and reconstruct and insulate the roof of the apartment building. The 35% (2009-2014) and 40% (2015-2020) options require applicants to carry out the work stipulated in the 25% option, and in addition, to install windows level with the insulation or window jambs provided with extra insulation, and to equip the building's ventilation system with a thermal energy storage unit¹⁶.

There are three main differences between the 2015-2020 grants scheme and its predecessor. The first innovation is the introduction of trained technical consultants to advise apartment associations on building renovations and possible solutions. The second innovation is the use of an external independent review process for design documents to ensure that they are of adequate quality and that all technical requirements are fulfilled. The third innovation is the commissioning of ventilation requirements. A measuring protocol must be drawn up in order to confirm that the required ventilation rates are achieved¹⁷.

Additional grant funding is also available to cover 50% of the cost of an energy audit, the production of project design documentation¹⁸, and technical consulting and inspection services. An energy audit is a prerequisite for all loan and grant applications. Audit and design documentation must specify the renovation work to be carried out on an apartment building and calculate the efficiency savings / rate by activity. Work must then be based on that audit and must be supervised through technical inspections to ensure compliance.

Loan and grant applications must be accompanied by at least three separate quotations for renovation work from different contractors. The banks and KredEX then decide to approve or reject, and only pay out once they receive invoices for the work completed.

Achieved or expected results

The scheme was launched in 2009 with the aim of funding at least 1,000 apartment building renovation projects. By the end of 2013, the loan scheme had exhausted its fund of EUR 72.6 million. The funding was awarded to a total of 615 apartment building renovation projects which aim to improve building quality and living standards in 22,534 apartments, and to achieve substantial energy savings. The main explanation for the shortfall in the

number of renovations funded (615) versus the initial goal (1000) is that, over the implementation period, there was an increase in the average loan amount. For example, an average EUR 75,000 loan in 2010 increased over time to an average EUR 117,000 for the period 2009-2013¹⁹.

Table 2: Renovation loan programme

Renovation loan programme	
Number of renovated buildings	615
Number of apartments/buildings	22,534
Number of inhabitants	51,828
Total net area of apartment buildings (m ²)	1,492,824
Total value of loans through KredEX (million EUR)	71.97
Total investment (million EUR)	102.74
Average loan (thousand EUR)	117
Expected energy savings	40%

Source: CityInvest analysis, 2015²⁰

The main types of work carried out include: insulation of facades (518 cases), roof repairs or replacements (320 cases), renovation or modernisation of insulation and ventilation (233 cases), and renovation or modernisation of heating systems (327 cases)²¹.

Apartment owners became more interested in the Renovation Loan Scheme once the Renovation Grant Scheme was introduced in 2010²². The grant scheme gave owners the opportunity to access financial support to cover the self-financing element of the loan scheme (at least 15% of the total renovation cost).

The key success of the renovation loan scheme is evidenced by comparing actual versus planned energy savings. The scheme's objective was to achieve 20% or 30% of energy savings in funded buildings, depending on their floor space (</>2,000m²)²³. Actual results have surpassed these initial targets, with average energy savings per building reaching almost 40%, which equates to savings of approximately 75 GWh per year and 15,000 tCO₂ per year²⁴. These results are contributing to a steady reduction in energy consumption across the country. According to Statistics Estonia, the national statistics office of Estonia, overall heating consumption in Estonian households has fallen by nearly 15% between 2009 (3,845 GWh) and 2014 (3,297 GWh)²⁵, and overall electricity consumption has fallen by just over 8% between 2009 (1,884 GWh) and 2014 (1,728 GWh)²⁶.

In the period 2010 to 2014, renovation grants awards totalled EUR 35.9 million. The grants were paid to support the renovation of 659 buildings. Table 3 shows a breakdown the grants awarded to renovation projects by grant type. The table also shows the grant award total and the total investment cost of the renovation projects supported.

Table 3: Renovation grants awarded

Renovation grants awarded	
Number of renovated buildings	659
Grant type – 15%	276
Grant type – 25%	182
Grant type – 35%	201
Total value of grants paid in million EUR	35.9
Total investment in million EUR	135

Source: CityInvest analysis, 2015²⁷

Between 2009 and 2014, a total of 4,014 grants were awarded to cover the cost of energy audits, project design documents and technical inspections, for a total of just over EUR 2.1 million, as shown in Table 4. The relatively low cost of an energy audit (EUR 350 on average, with 50% covered by a separate grant), and the fact that an audit must be completed before any application for a renovation loan or grant is made, provide some explanation for the high number of energy audit grants (2,442). Fewer grants to support post audit project design work (1,362) were awarded, indicating that only 55% of those that gained an energy audit grant decided to move forward with a renovation project design.

Table 4: Other grants awarded

Other grants	Number paid	Amount (EUR)
Energy audits	2,442	856,000
Expert evaluations	210	49,000
Project design (post energy audit)	1,362	1,210,000
	4,014	2,115,000

Source: CityInvest analysis, 2015²⁸

According to KredEx, the new grant scheme 2015-2020 has started off better than expected. 166 grant applications have been received by October 2016, and 85% of those have applied for the 40% grant. This means that 85% of applications to the new scheme thus far are for extensive renovation projects. This is a good indication that the scheme is incentivising owners to invest in significant building upgrades. 25 projects have been completed so far with an average investment of EUR 250/m² and an average grant of EUR 100/m². Over the course of the scheme, EUR 102 million is expected to fund the renovation of 600 buildings²⁹.

Perspectives and lessons learned

From an **implementation perspective**, the scheme's holding fund manager, KredEx, considers the loan scheme to have been a success as it has achieved an average 40% improvement in energy savings in the apartment buildings that received a renovation loan. Dissemination activities were also successful in encouraging owners of energy inefficient apartment buildings to implement innovative solutions to make them more energy efficient³⁰. KredEx also concludes that energy audits may have

been a bit too optimistic in the period 2009-2014, and should be more realistic in the next phase (2015-2020). Greater emphasis should be placed on the technical aspects of the scheme, for example, the need for better building design documents³¹, and the need to provide better technical advice to help apartment associations to make the right choices throughout the renovation process³².

Another implementation perspective is given by the International Energy Agency in a report on energy measures in Estonia. It argues that while the loan scheme has been very successful and has delivered strong results, there is a need to move away from a stop-start approach to support schemes, towards a support structure that provides greater continuity. This would help to maintain and build upon the momentum that good schemes can create, in terms of funding, reach and results³³.

From a **government perspective**, the key to the success of this scheme has been the combination of loan and grant funding options and the provision of higher levels of financial support. This combination has enabled the scheme to incentivise renovation projects with more ambitious energy saving objectives³⁴. The government also takes the view that without EU funding, it is highly unlikely that the apartment building renovation scheme would have been implemented in Estonia.

As the government department with overall responsibility for the scheme, MoEAC argues that the initiative has achieved results beyond their expectations. The renovation projects funded have helped to reduce energy consumption in apartments by nearly 40% overall. This easily surpasses the scheme's initial target of a 20-30% reduction³⁵.

From an **energy audit perspective**, it is essential to measure energy efficiency, particularly in old buildings, to create awareness and encourage improvement. The scheme, which finances renovations based on an energy audit, has helped to make people more aware of their environment, their living conditions, on energy consumption and cost as important renovations not only save energy, but also improve living conditions and increase the lifespan of apartment buildings³⁶.

From a **community perspective**, the renovation scheme promises to deliver valuable long-term benefits to apartment residents and their descendants. One of the residents of the Põltsamaa apartment building says that all residents welcome the renovation work that is taking place in their building, thanks to the award of KredEx funding. Residents recognise that the benefits afforded by the renovations outweigh the potential burden of the repayments over 10 to 20 years. The renovations will help to deliver more modern living standards, reduce energy, building management and maintenance costs and are expected to achieve up to a 50% increase in energy savings. They will also help to increase the appeal and value of apartments, making them more desirable and profitable in the property sales and rental market³⁷.

Endnotes

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