REVERTER

Riga, Latvia

Roadmap (2024)

Owner-occupied apartments in multi-family buildings

Co-funded by the European Union

Area characteristics

The capital of Latvia, Riga, founded in 1201, is located in the central part of Latvia, on the southern coast of the Gulf of Riga of the Baltic Sea. Although the area of the city of Riga occupies only 0.5% of the total area of Latvia, the city is home to a third of the total population of Latvia, making it the largest city at the level of both Latvia and the Baltic States.

The territory of Riga city municipality is divided into:

- 6 administrative territorial units: Centre district, Kurzeme district, Northern district, Vidzeme suburb, Latgale suburb, Zemgale suburb;
- 58 neighbourhoods.

Riga has a high share of green areas. According to the Riga Territorial Plan for 2030, the city is characterized by 41% of natural areas, of which 16% of waters and 25% of greenery and natural areas. The coldest months typically are January, February and December. According to Latvian National Building code on average there are 192 heating days, with an average outside air temperature of 1.1°C, which for an indoor air temperature of 20°C. would equate to 3,630 degree-days. The average outside air temperature for the coldest five days in a year is -9.5°C, with absolute minimal temperatures reaching approximately -20°C.

Population characteristics

Since 1991, Riga, as most areas of Latvia, has seen a gradual decline in the number of inhabitants (i.e., the population has decreased by 32%). This is partly explained by the decrease in birth rates and the resettlement of the population in near proximity to the capital. At the beginning of 2021, the population of Riga city reached 621,120 people.

Riga is characterized by a multinational composition of the population; the city is mostly inhabited by residents of Latvians (47.2% in 2021) and Russians (36% in 2021). In 2020, the largest number of inhabitants is concentrated in the microdistricts of Soviet-era apartment buildings – Purvciems (55,024 inhabitants, 9%), Kengarags (45,783 inhabitants 7%) and Imanta (43,835 inhabitants 7%). The other neighbourhoods are below 4%.

Riga's economy forms an important part of the country's economy, it is justified by the volume of GDP, the number of employees, the number of enterprises, investment volumes, as well as other indicators:

- 341,600 or 34.8% of the total economically active population of Latvia live in Riga;
- A total of 480,100 people is employed in Riga, which is 46% of all employed in Latvia;

35.1% of all employed in Riga are residents of Riga.

Housing characteristics

Three or more apartment buildings are considered to be apartment buildings. In the city of Riga in total there are 11.7 thousand such buildings, which is 29.7% of the total number of apartment buildings in Latvia. Referring to the data provided by the REA, the total useful area of apartment buildings in Riga is 18,615 thousand m^2, where the average useful area is 1,585 m^2 per building. The largest share of buildings (59%) are buildings that were put into operation in the period up to 1945. Buildings put into operation in the period from 1946 to 1993 have the largest useful area (56% of the total), that is, buildings built during the USSR. Studies show that the energy efficiency requirements of multi-apartment buildings built during the USSR occupation and up to 2015 do not comply with the requirements of the currently valid Cabinet

Regulation No. 280 “Regulations Regarding the Latvian Construction Standard LBN 002-19 "Thermal Engineering of Building Envelopes”. Riga has a high share of buildings in need of deep renovation (about 6,000 apartment buildings) and at the same time low activity of renovation of existing buildings. By 2019, only 159 or 1.4% of the total number of apartment buildings in the city of Riga have been renovated in Riga. Building managers play an important role in promoting the renovation of multi-apartment buildings. Riga has a lot of competition in the house management market, as well as many new companies that are entering. One of the largest management companies is SIA "Rīgas namu managers" (RNP), which manages 4284 residential buildings. In total, more than 170 building management companies and more than 500 apartment owners’ cooperative societies (DzĪKS) are registered in the city of Riga.

Energy poverty status

The analysis of energy poverty in the Riga pilot area is based on data from Eurostat's EU SILC survey, covering the years 2017-2021. The findings indicate that the share of the population living in dwellings with a leaking roof, damp walls, or floors is lower in the pilot area compared to the national average by nearly 3.5-6%. Similarly, the share of the population with arrears on utility bills is also lower in the pilot area, with the difference decreasing over time from 2.5% in 2017 to 1% in 2021. However, the share of the population unable to keep their homes adequately warm is higher in the pilot area compared to the national average, although this discrepancy has decreased from 6.8% in 2017 to 2.5% in 2021.

On average, the ratio of heating energy expenditure during winter to net income is 9.4%. More than 13.4% of the households claim that they spend more than 20% of their available income to cover their heating energy expenditure needs in winter, and 29.4% of the households prefer not to provide feedback. Practically all households with a net income below €900 say they are struggling to make ends meet, while households with a net income above €2,500 experience difficulties to a much lesser extent

Overall, the energy poverty indicators are improving both in the pilot area and nationally, with the gap between the two levels significantly narrowing over the years. The share of the population experiencing severe energy poverty issues has decreased, and the share of the population not experiencing energy poverty issues has increased. Additionally, households living in larger buildings tend to experience fewer energy poverty problems, while those in smaller buildings or detached houses face higher issues with leaks, keeping their homes warm, and arrears on utility bills. Tenants paying reduced rent are more prone to energy poverty, and those living in free accommodation are the most vulnerable in terms of keeping their homes adequately warm. Households experiencing great difficulty in making ends meet also present higher energy poverty rates.

Willingness to participate in energy retrofit actions

A number of barriers for not having participated in subsidy programmes were identified during the surveys of the households carried out in 2023. The most important barrier was the inability of apartment owners to apply for a building renovation subsidy. Another indicated problem was the high bureaucratical burden of application process to receive a subsidy. Relatively high percentage of respondents indicated that they don’t think that there would be large enough energy savings to substantially affect their energy bills. It seems also that people are reluctant to take on any action as relatively high percentage of respondants have indicated that nobody in their building has raised the question of building renovation through subsidy programme. The subsidy programs of building renovations do not cover all the necessary costs for building renovation, therefore the inability to repay the additional renovation costs was also mentioned as of the barriers.

As far as information about subsidy programmes is concerned, participants seem to adopt a passive attitude, believing that municipalities should inform households about existing possibilities to finance energy saving actions. This finding highlights the importance of one-stop shops in encouraging households to engage in such programmes.

Renovations triggered by REVERTER

REVERTER is expected to contribute to the renovation of multifamily buildings in the period during project implementation phase (3 MFBs) and five years after the completion of project (10 MFBs) through the establishment and operation of the physical and digital one-stop shops, visits to homes of energy poor households by REVERTER Ambassadors who will inform them about energy renovation issues and the awareness-raising and training activities in order to reinforce the existing level of knowledge of the energy poor households and their neighbours who are living in the same MFB and who are also in risk of energy poverty due to poor technical condition of the building they inhabit. According to the initial estimates described in Section 3 "Impact calculation table" of D1.4 "Extract of the project data from the LIFE KPI webtool", approximately 5,700 households in Riga will be reached through information campaigns, home visits and social engagement events. Of these households, it is estimated that around 670 will visit the physical and digital one-stop shops and around 50%, i.e. 334 households, will express interest in upgrading their home in the next 5 years. The contribution of REVERTER project is summarised in Table 15, while the allocation of the total investments to public and private investments triggered by REVERTER project is presented in Table 16.

Table 1. Contribution of REVERTER project to the implementation of the specific roadmap for the renovation of MFBs during the implementation of the project and five years after the end of the project.

Impacts	Energy poor households Tenants – Multi-family houses-Apartments (MFB)
Number of newly renovated buildings	**13**
Resulted cumulative final energy savings (GWh)	0.55
Resulted cumulative primary energy savings (GWh)	0.49
Resulted cumulative CO_2 reduction (ktn CO_2)	0.16
Resulted employment impacts (person-years)	21.39
Resulted cumulative multiple benefits (million €)	0.006
Required new investments (million €)	**1.38**

Table 2. Allocation of the total investments to public and private investments triggered by REVERTER project (million €).

Period	Roadmap	Energy poor households	Share	Public funds	Private (own) funds	Total
2022-2030	**Energy poor households Multi-family houses-Apartments (MFB)**	**Category I**	80%	0.55	0.55	1.10
		Category II	20%	0.25	0.03	0.28
		Total	**100%**	0.80	0.58	1.38

The REVERTER project

The REVERTER stands for Deep REnovation roadmaps to decrease households VulnERability to Energy poveRty. The REVERTER project is funded under the LIFE Programme with under the Grant Agreement No 101076277.

9 Roadmaps

The roadmaps are tailor-made to the characteristics of the building stock, the characteristics of the vulnerable households and the climate conditions, to cover a sufficiently cohesive group of cases that will allow for a larger-scale rollout and replication of the proposed actions for the effective analysis and tackling of the problem. The roadmaps will target the worst-performing homes first ("worst first" principle), will cope with split-incentive dilemmas and will address market, information and behavioural failures through the creation of "one-stop shops" (OSS) in 4 countries as defaults for the enrolment of vulnerable households in subsidised energy efficiency improvement programmes for buildings.