1. OVERVIEW OF THE RESIDENTIAL BUILDING SECTOR

Lithuania has 2.8 million inhabitants. Its population density in urban and rural areas is quite different, as 67% of its people live in cities and 33% in rural areas. Reliable and up-to-date statistics related to buildings are scarce. In fact, the Ministry of Environment recently launched a public tender to develop a long-term strategy for building renovation, and one of the main tasks it includes is the collection and analysis of data on existing buildings.

In 2018, slightly more than half (59%) of the country’s population lived in multi-apartment buildings and 41% in one-dwelling houses. Seventy-five per cent of dwellings were constructed before 1991 following Soviet-era building codes. All these buildings are in low energy efficiency classes (E and F): it was not until 1992 that a new, stricter regulation for construction was implemented. The multi-apartment buildings built before 1992 hold the greatest potential for reducing energy consumption and increasing energy efficiency to reach European targets. In addition, young, average-income families prefer new houses in the suburbs. This fact raises new urbanistic challenges since these areas are usually not well developed in terms of services and infrastructure (public transport, kindergartens and schools etc.). Upgrading city apartment buildings would help to reverse this trend. In smaller cities, assuming a positive trend in job creation, this might prevent young people from feeling the need to migrate to major cities or to Western European countries.
According to official statistics, in 2018 there were 1,451,500 dwellings in Lithuania. Almost all were privately owned and only 2.1% were owned by the Government or the municipalities. The current ownership profile of Lithuania’s apartment buildings owes much to the fact that, during the Soviet era, the state was the owner of the apartments. After Lithuania regained its independence, it was decided to allow the privatisation of the apartments: people living in the apartments were offered the chance to become their owners. Since then, the ‘one apartment – one owner’ policy has been implemented. This means that the state no longer has the obligation to oversee a huge apartment building sector, and apartment owners have far more control over their property. At the same time, having a large number of apartment owners means that agreeing on home maintenance or renovation interventions can be a long and difficult process.

There is no specific law on rentals in Lithuania, and apartment owners often do not register their contracts when renting apartments, seeking to avoid taxes. Therefore, there are no reliable statistics on the number of rented apartments. As for social housing, the amount in Lithuania is quite low, and public authorities try to avoid building up levels since that may cause quick depreciation of their real estate assets.

In Lithuania, the supply of district heating and natural gas networks are natural monopolies. Pilot projects for renovation at district level, which involves comprehensive renovation of city infrastructure (engineering networks), are in progress. By law, district heating companies are only allowed to provide heat supply – additional services such as energy management create a conflict of interest. The conflict between the core activities of energy utilities and energy efficiency may have consequences in Lithuania. Utilities are interested in selling more energy, but the renovation of buildings in Lithuania leads to a 50-60 % reduction in heat demand. With lower sales, the income of the utilities would be reduced but the cost of maintaining the grid would still be the same, so companies are not interested in high-quality renovations that lead to dramatic drops in energy consumption. Following the introduction of Directive 2012/27/ES, utility companies have signed agreements with the Ministry of Energy to promote energy efficiency among consumers. In practice though their services to consumers are limited, and they only provide general information on the best ways to save energy through energy renovation.
2. REGULATORY FRAMEWORK

The Lithuanian government is encouraging deep renovation, including new envelopes and new engineering systems, so that maximum efficiency is achieved. Regulatory and policy instruments such as the National Energy Strategy and Government Programme for multi-apartment building renovation view renovation as a key way of increasing energy efficiency in residential buildings. A national long-term building renovation strategy is under preparation so far.

Resolution of the Parliament on the approval of a National Energy Independence Strategy
July 2012, last amendment June 2018

Defines the vision of the Lithuanian energy sector, its implementation principles, strategic directions, goals and objectives. One of the goals is to promote a deep renovation of residential multi-apartment and public buildings.

Housing Strategy of Lithuania
January 2004 – March 2017

Taking into account the current housing situation in Lithuania and the principles of housing policy in the European Union, as well as the State Long-term Development Strategy, this strategy sets long-term housing policy objectives and priorities for improving housing legislation, programmes and measures for development and renovation, as well as financial and social assistance for the population. The implementation period for this strategy ends in 2020.

Lithuanian government decree on Renovation Programme
September 2004, last amendment May 2019

Intends to encourage and support the owners of multi-apartment buildings, built in accordance with the technical standards of construction prior to 1992, to renovate multi-apartment buildings in order to increase their energy efficiency.

The Act on Associations of Multi-apartment Home Owners
March 1995, last amendment January 2017

Establishes management procedures for the joint ownership of multi-apartment houses, including the establishment, management, operation, reorganisation and liquidation of the homeowner’s association and the rights and duties of the association.

The Act on State Aid for the Renovation of Apartment Houses
July 1992, last amendment January 2020

Establishes conditions, methods and procedures for the provision of state support for the renovation (modernisation) of apartment buildings.
The Act on Cash Social Assistance for Poor Families and Single Residents
January 2012
Establishes the principles, sources of financing, rights and obligations of persons receiving social assistance (monetary subsidies). If the multi-apartment house owners have implemented a project to renovate the multi-apartment building, the low-income apartment owner will receive state support to repay the loan.

The Programme of the Government of the Republic of Lithuania
March 2017, last amendment September 2019
Contains commitments to improve energy efficiency. The implementation of at least 500 multi-apartment building renovations each year is foreseen.

Technical Regulation of Construction STR 2.01.02: 2016 ‘Design and certification of energy performance of buildings’
January 2017, last amendment November 2019
Applies to the design of heating in residential and non-residential buildings, energy efficiency, the energy performance certification of buildings and the calculation of the capacity of heating systems.

Lithuanian Government Decree on the rules for providing state support for renovation of multi-apartment houses
December 2009, last amendment June 2019
Establishes conditions and procedures for the supervision of the implementation of multi-apartment building renovation projects, state support to apartment owners for the renovation of multi-apartment houses, and expenses payment for the preparation of multi-apartment building renovation projects.

Description of the procedure for the preparation of multi-apartment building renovation projects
November 2009, last amendment January 2020
Sets out the requirements for content and preparation of apartment building renovation projects.

Lithuanian Government Decree approving the description of the procedure for the development and implementation of district energy efficiency programmes
June 2016
Helps select districts within the municipality for preparation, implementation and financing of energy efficiency improvement programmes within deep renovation projects (to increase the energy efficiency of its buildings and associated infrastructure).
3. POTENTIAL IMPACT OF BUILDING ENERGY RENOVATION ON THE MARKET

Most publicly available information about the Lithuanian residential sector is related to multi-apartment houses. The multi-apartment buildings built before 1992 hold the greatest potential for reducing energy consumption and increasing energy efficiency to reach European targets. But even though these apartment buildings – currently rated energy class E or F – can reach a C class after renovation and reduce heating consumption by 40 to 60%, there are several barriers to achieving their renovation on a wide scale. For this segment of buildings, for example, the next deep renovation is not due to take place for another 20 to 30 years. Besides this, some of the apartment buildings are completely worn out or have a very uncomfortable layout – this makes them unattractive for investors, as their renovation costs are higher than their market price. In addition, buildings built before World War II have serious constraints: some of them are already in very poor technical condition, which makes them uneconomical to renovate, while others are subject to heritage regulations that restrict renovations.

Other problems are related to large construction companies that are reluctant to participate in residential building renovation projects due to lengthy bureaucratic public procurement procedures, unfavourable lowest-price criteria, and the lack of a stable funding framework for renovation projects.

The Lithuanian government has made efforts to speed up the pace of apartment renovation by amending a number of laws (e.g. the Act on Associations of Multi-apartment Homes, Act on State Aid for Apartment Renovations, Act on Social Cash Assistance for Poor Families and Single Residents, among others). By 2014, only approximately 1,000 buildings had been renovated. In 2017, the government set a target of renovating 500 apartment buildings each year. However, progress has been slow.

Figure 2 – Energy consumption in total and in residential buildings in Lithuania (Eurostat, 2020)
**Potential market impact**

According to Eurostat data (Eurostat, 2020) energy consumption in residential buildings is slowly decreasing, with an average annual decrease of 0.6% between 2010 and 2018. The main reason for this decrease is the introduction of some energy-saving measures in existing buildings and the construction of energy-efficient new residential buildings.

According to Lithuania’s National Energy and Climate Plan (NECP), adopted by the Lithuanian government at the end of 2019, there is an overall objective to promote the renovation of 50% of the national public and residential building stock by 2030, involving 300,000 residential buildings. The NECP also assumes that the measures supporting the deep renovation of 500 apartment buildings per year will be maintained, and projects that the additional energy savings due to the implementation of the apartment building renovation programme will be 28 GWh/year.

**Figure 3 – Estimation of baseline and potential savings** (Eurostat, 2020) (RenOnBill consortium, 2020)

However, by projecting the implementation of energy efficiency measures on 300,000 residential buildings, a 30% decrease in the energy intensity per capita in 2030 is estimated. Therefore, the total energy savings achievable from 2030 will be 5 TWh/year.
4. FINANCING THE ENERGY RENOVATION OF BUILDINGS

National funding programmes for multi-apartment buildings offer subsidies for project development and soft loans for construction works, as well as grants for low-income earners. Under these programmes, Lithuania’s government intends to deeply renovate 500 apartment buildings every year, which is still a low rate considering the large amount of apartment buildings in need of major energy-efficiency overhauls. Nothing similar exists at municipal level. There is a single-family building renovation support programme, however, its budget is quite limited.

Government support for apartment renovation projects, currently covering about 30% of construction works and loan repayments for low-income citizens, is a crucial factor for apartment owners when deciding if a deep apartment renovation project should be started. Given that there are about 44,000 apartment buildings in Lithuania and at least 75% need renovation, the renovation rate is still insufficient.

Deep renovation of buildings requires considerable financial resources. High-income owners, who can afford to buy a single house, either renovate the building using their own resources or borrow money from the bank on similar terms to real estate loans. Owners of multi-apartment flats on average have lower incomes so, without government support, deep renovation will not happen. In the best-case scenarios, some individual measures may be adopted, which can be covered by the maintenance budget provided by homeowners. Bank loans are granted only in exceptional circumstances, for example if an accident occurs and there are no other financial resources available to deal with the consequences.

Financial support for apartment building renovation is granted exclusively to homeowners and is not available to tenants (the latter represent just 10% of the population).
Private financing schemes

Private financing for the renovation of multi-dwelling houses is practically excluded in Lithuania. The biggest problem is the need for multi-apartment co-owners to agree on loans and to provide loan repayment guarantees.

In fact, energy service companies (ESCOs) operate in Lithuania on a very small scale due to the uncertainty of the legal framework. In 2016, EBRD took the initiative and led the legislation needed for the implementation of the ESCO model. The plan is to use the ESCO model for the renovation of government-owned buildings. However, although the model’s implementation has been accomplished, it has not led to an expansion in renovation through ESCO schemes.

More details are in the full report