Belgian property market on the back foot in race to climate neutrality

Belgium needs to significantly increase the pace of renovation in order to meet the 2050 target of having all homes climate-neutral, but faces a bigger challenge than other countries due to having an older and larger housing stock, fewer flats, and a higher proportion of low-income homeowners who lack the financial resources for energy renovations

A suburb in Belgium

Real estate is crucial to the EU's goal of becoming climate neutral by 2050

Energy efficiency is becoming increasingly important for the real estate market and will continue to play a crucial role in the future. Europe's ambition is to become the first continent to become climate neutral by 2050, meaning that the European Union will no longer contribute to global warming. This goal has been embraced by all EU member states. As buildings currently account for 36% of greenhouse gas emissions in the EU, the construction and real estate sectors play a decisive role in achieving this goal. Europe wants to significantly reduce the greenhouse gas emissions and energy consumption of the building stock by 2030 and make it completely climate-

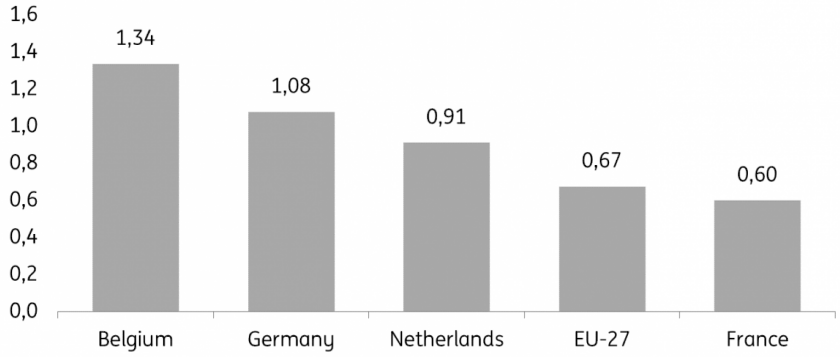
neutral by 2050. It is vital to significantly increase the renovation rate of energy-inefficient buildings to achieve these ambitious targets.

Heating buildings responsible for 20% of greenhouse gas emissions

Building heating accounted for 20% of Belgium's greenhouse gas emissions in 2021, of which 15% was for heating residential buildings and the remaining 5% for heating non-residential buildings. In the residential sector, we see a clear downward trend in greenhouse gas emissions caused by heating. Between 1990 and 2021, for example, emissions fell by 20% despite an increase in the number of buildings. The decrease is largely due to the milder winter weather in recent years, which means we need to heat less. On the other hand, the improved energy efficiency of buildings has also reinforced the downward trend. In contrast, in the non-residential sector, which includes shops, offices, etc., greenhouse gas emissions increased by 36% between 1990 and 2021, partly due to the strong growth in the number of employees and therefore buildings. While the residential sector will also have to greatly increase the pace of renovation to reduce emissions, the non-residential sector in particular will have to play catch-up in the coming years.

Despite the progress, Belgium does remain one of the worst-performing countries at a European level in terms of residential energy consumption and per capita CO2 emissions. Only Luxembourg has even higher emissions per inhabitant. In 2019, average Belgian residential emissions were 1.34 tonnes of CO2 per year, almost double the European average and well above Belgium's neighbours. To meet the climate goals, greenhouse gas emissions must fall by at least 80% compared to 1990 by 2050, meaning that current residential CO2 emissions of 1.34 tonnes per person must fall to around 0.30 tonnes.

Greenhouse gas emissions per capita, residential sector, 2019



Source: Eurostat

Unfavourable starting position makes energy transition extra challenging

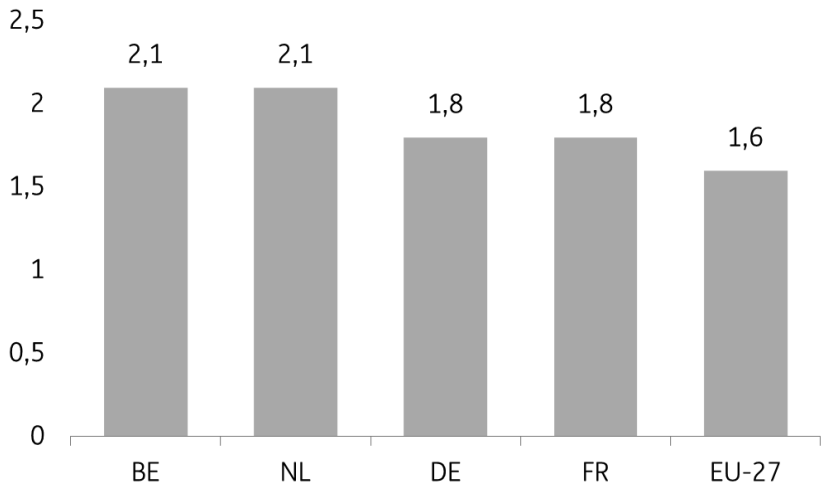
While all European Union countries face the same challenge of making their entire building stock climate-neutral by 2050, Belgium will have to make extra efforts to achieve this objective. The Belgian real estate market has a number of characteristics that place it in a less favourable starting position for the upcoming energy transition. Below we discuss each of these factors.

1. On average, homes are larger than those in neighbouring countries

According to Eurostat figures, Belgian homes are significantly larger than those in neighbouring countries and the EU average. With an average house size of 124 m² in 2012, Belgium only lost out to Luxembourg (131 m²) and Cyprus (141 m²). New houses built since 2012 are slightly smaller on average and are likely to have brought the Belgian average down a little. Nevertheless, Belgium will still score highly in the rankings because new construction is only a small part of the total building stock. Moreover, other European countries are also building smaller and smaller homes.

In addition, the size of dwellings can also be determined by the average number of rooms per person. According to Eurostat data, Belgium had an average of 2.1 rooms per person in 2021, leaving it a little behind Malta (2.3 rooms per person) and matching the Netherlands. This is remarkably higher than Germany and France, with an average of 1.8 rooms per person, and the EU average of 1.6 rooms per person. The above indicators show that, on average, Belgian houses have a larger living area than in neighbouring countries and have more rooms to heat and cool, so they consume more energy. Moreover, large houses also have greater heat loss because there are more doors, windows and vents, allowing heat to escape more easily.

Average number of rooms per person, 2021

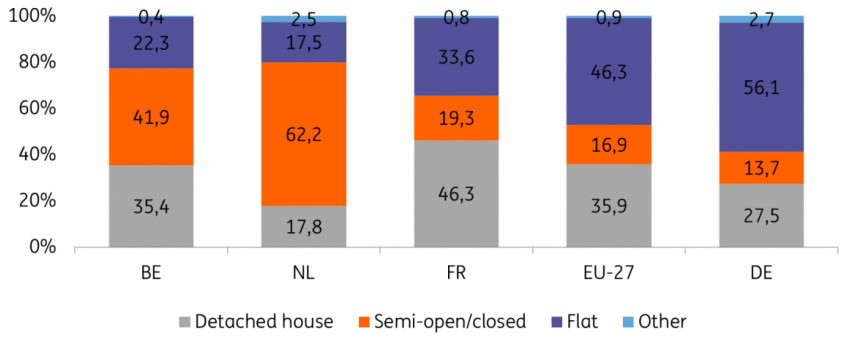


Source: Eurostat

2. Belgium has relatively more open and semi-open buildings

In general, flats are more energy-efficient than houses because they have more common walls. As a result, less surface area is in contact with the outside air and less heat is lost. In addition, flats also tend to be a bit smaller than houses, which means fewer rooms need to be heated. With only 22.3% of the total housing stock in the form of flats, Belgium currently has the third lowest share of flats in Europe. Only Ireland (9.8%) and the Netherlands (17.5%) have an even lower share. Then again, unlike the Netherlands, Belgium has relatively more four-fronted houses, where the potential for heat loss is naturally also higher than in closed or semi-open buildings.

Building stock by housing type, 2021



Source: Eurostat

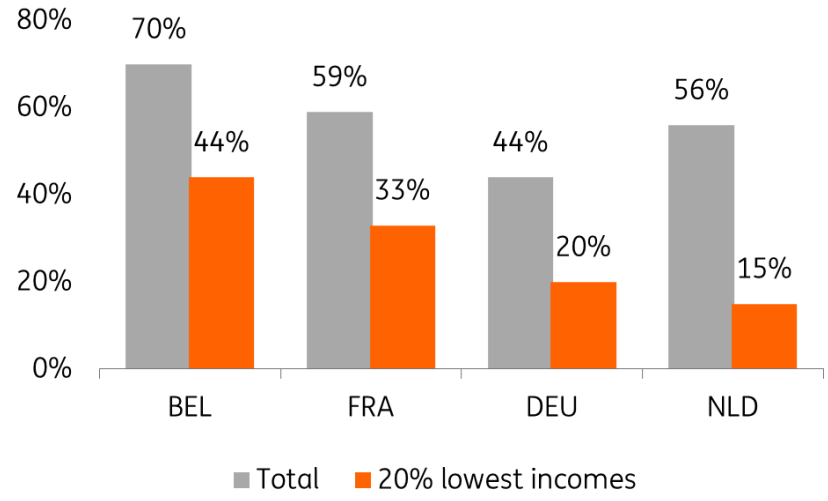
3. Belgium has a very old building stock

More than 60% of residential buildings in Belgium were built before 1981, meaning they are older than 40 years. Moreover, almost a quarter of residential buildings were built before 1946, meaning they are older than 75 years. Older homes tend to have higher heating requirements than new homes. Energy efficiency was not a priority back then and technological solutions were less developed than today.

4. Relatively more low-income people own their homes

Finally, compared to other countries, Belgium also has a high share of homeowners among low-income households, who often do not have sufficient financial resources to pay for a full energy renovation. Plus, low-income households often live in houses with lower energy efficiency, which means that renovation costs are just higher for them.

Homeownership by income group, 2015 or latest available year



Source: OECD

Belgian buildings require more energy for heating

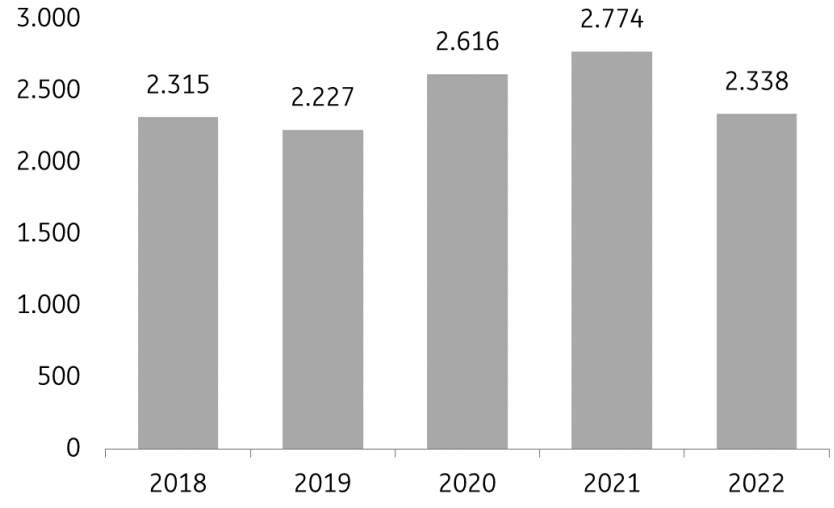
These different characteristics of the Belgian property market, namely relatively large and old houses and more open and semi-open buildings, mean that Belgian buildings lose a lot of heat. Therefore, in Belgium, 73% of household energy consumption goes to heating buildings. This puts us in second place in Europe, after Luxembourg which uses 83% of its energy consumption to heat buildings. Belgium thus scores considerably higher than Germany (67%), France (63%), the Netherlands (61%) and the EU average (63%).

Many Belgians hesitant to tackle their renovation

Although high energy prices have significantly reduced the payback period for energy renovations and stricter regulations are on the way, many Belgians still seem reluctant to tackle the energy renovation of their homes. Last year, there were many relatively minor interventions, such as installing solar panels or extra insulation, but there are signs that the pace of in-depth energy renovations has slowed.

Although during the pandemic, the number of building permits issued for renovations rose sharply as many families had more time and spent less money on services, the number fell back to pre-pandemic levels in October. The number of mortgages granted for renovations also fell in the second half of last year to below levels seen in recent years. Finally, data from the European Commission also showed that households' intention to renovate their homes over the next 12 months is at its lowest level in more than 20 years and significantly lower than in neighbouring countries.

Number of building permits granted for renovation, October month only



Source: Statbel

Need for integrated solutions for all aspects of energy renovations

To conclude, it seems that the pace of deep energy renovations is slowing down after

accelerating during the pandemic. There are several barriers that families experience in tackling their renovation. Many families do not have sufficient financial resources to carry out a renovation, but also experience a lot of other non-financial obstacles that keep them from starting. Families are left with many questions about the total cost of an energy renovation, the payback period, the effect on the EPC score and the value of their house, and the ideal sequence and planning of energy renovations.

In addition, home renovation requires technical, administrative and legal knowledge and depends on cooperation between different specialised suppliers, which is an additional non-financial barrier. Nevertheless, the renovation rate will have to increase dramatically to meet EU targets. It is therefore essential to help households through the different steps of energy renovation and work towards integrated solutions that offer households a tailor-made solution, taking into account their financial possibilities, their renovation preferences and the characteristics of their home.

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