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PART 1/2

COMMISSION STAFF WORKING DOCUMENT

Understanding the housing crisis

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

European Affordable Housing Plan

{COM(2025) 1025 final}

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Understanding the housing crisis: Staff Working Document accompanying the European Affordable Housing Plan

1. EXECUTIVE SUMMARY

This Staff Working Document examines the drivers for, and consequences of, the housing affordability crisis across the EU. Housing affordability, i.e., the relationship between housing costs and household income, for both renting and purchasing, has worsened in particular in urban areas. The Staff Working Document (SWD) analyses the social and economic consequences of this housing unaffordability as well as related environmental concerns. It further examines both the demand drivers and supply constraints, and the reasons why the supply is not keeping up with increasing demand. This SWD provides an evidence base for the Commission's European Affordable Housing Plan ([1]), drawing on and consolidating the rich data and research available on this subject.

1.1. Measuring the impact of housing affordability

Average country-level numbers risk understating the crisis as they hide significant regional differences. The problem of affordability is most acute in some urban areas and tourist regions. Price-to-income ratios have generally worsened across the EU over the last decade, signalling increased pressure on purchase affordability. However, the commonly used country averages also hide a more difficult situation for prospective buyers as opposed to existing residents. Regional data shows that purchase affordability, expressed as the number of square metres that a household can afford when spending one third of average income on a 30-year mortgage, is most acute in cities and tourist regions. In those regions even a medium income is not sufficient to buy a small apartment. While housing prices are to some extent shaped by macroeconomic factors such as interest rates and economic growth, residential real estate is inherently location-bound and therefore influenced strongly by local land prices. Land prices are determined by distance to and quality of local infrastructure (public and private) and regional developments such as demographic trends (migration) and regional economic developments.

Similarly, country-level rent data does not show how renting has become less affordable, and that finding an affordable apartment or house to rent is hardly possible in some urban areas. First, while average rents have increased less than house prices or household income, this average is a mix of market rents, regulated rents, subsidised rents and cost-free rents for social purposes, so it does not reflect the conditions faced by many on the rental market. Second, the average combines existing contracts with newly signed contracts – the market for newly signed contracts seeming particularly constrained but with insufficient official data to back this statement. Third, the national average also masks strong regional disparities. Regional data shows that in cities and

([1]) European Commission, *The European Affordable Housing Plan* (COM (2025) 1025, 2025.

regions in high demand, even one third of average income is often not sufficient to pay the rent on a 25m^2 apartment.

With an increasing difference between new market rents and rents paid for older, partially regulated contracts, rental markets got "sticky", and units are not only unaffordable but sometimes simply not available. The difference between new market rents and existing contracts is widening. In light of this gap, even moving to a smaller apartment can result in a higher rent, especially in growth poles and metropolitan areas. Consequently, the high costs of new rental contracts can impede mobility, making rental markets "sticky", i.e. turnover is reduced as tenants prefer to stay in the current place even if it does not meet their needs as new rent contracts are unaffordable. This could mean aging tenants staying in oversized homes or younger tenants staying in overcrowded dwellings for longer than wished.

Newcomers and households that need to move are particularly affected by the housing shortage. First-time buyers face the full brunt of the increase in prices. Those homeowners who bought their apartment or house some years ago, often with a fixed-rate mortgage, are not directly affected by the housing shortage in tight markets. While some may benefit from increased property values if they choose to sell, other might find themselves in a challenging situation. Despite the rise in property value, finding a new affordable home remains difficult, especially when comparing prospective monthly costs of rent or a new mortgage against the current, fully or nearly fully paid-off mortgage. Similarly, those having rented their unit many years ago with a long-term rental contract are less affected by the housing crisis.

With increasing house prices and rents, low- and middle-income households struggle to find a home in regions that offer the best employment or education opportunities. Even 30% of average income is not enough to acquire a small apartment with a 30-year mortgage, and the same 30% of average income is also insufficient to rent a modest unit ([2]). Consequently, particularly in urban areas and growth poles a growing share of the population finds it increasingly difficult to find a place to live. Thus, young adults starting their career, young families and low- and middle-income households are particularly hit by the housing crisis in Europe.

Increasing housing scarcity and unaffordability in the EU mean that living conditions are getting worse, with negative implications for health, well-being and future prospects. Poverty and homelessness are closely linked to unaffordability of housing. High housing costs disproportionally affect vulnerable groups, including young people, children, people with disabilities, homeless, older adults, single parents, migrants, people at risk of discrimination and victims of domestic violence. Children living in inadequate and unstable housing often face serious

([2]) Sielker, F., Banabak, S., Gerhalter, M., Neuhuber, T., Sutterlütti, D. et al., *HOUSE4ALL: Access to Affordable and Quality Housing for All People. Final Report,* ESPON EGTC, 2025, https://www.espon.eu/publications/house4all-main-report.

social consequences, including disrupted education, mental and physical health damage, and social isolation. Insufficient affordable and adequate housing poses a barrier to higher education, limiting not only competitiveness and the potential for innovation but also social mobility opportunities. Housing unaffordability directly impacts demographics - young people leave their parents' home later and may also delay the decision to have children or have fewer children. Younger generations are facing more challenges in becoming homeowners, leading to intra-generational disparities in wealth accumulation and security over a lifetime. High housing costs have significant impacts for most categories of essential workers, often with modest earnings, hindering their ability to live near work or support networks.

There is a strong connection between social issues and housing. On the one hand, social problems (e.g. job precariousness, discrimination, poverty) can lead to housing difficulties, so tackling these issues can help prevent or alleviate housing-related challenges. On the other hand, housing initiatives have the potential to contribute positively to society by addressing broader issues, since housing and the built environment in general are preconditions for social inclusion. Therefore cities, regions, and housing developers can use the knowledge about these connections to deliver high quality housing with added social value.

When new housing units are built or existing buildings are renovated, considering the social dimension of housing to create liveable neighbourhoods with an added social value is key. The housing affordability crisis should not be addressed by providing cheap housing in non-well-connected areas that lack the necessary (social) infrastructure and services and does not meet high quality living standards. This could result in the development of segregated neighbourhoods that are virtually service deserts, besides being counterproductive to work-life balance of workers. In practice, this means allowing for people with different income levels and socio-demographic characteristics to live in the same area and/or the same building ("mixity" instead of segregated housing / segregated neighbourhoods). Considering all these dimensions leads to housing quality in a wider sense and enable municipalities and housing organisations to also provide/forecast and organise housing policies and the necessary integrated services (e.g. social/care services, local infrastructure, shops, transport) to create liveable neighbourhoods.

1.2. Key drivers – identifying the causes of the housing crisis

A principal cause of the housing crisis is that supply has not kept up with demand. To bridge this gap over the next decade, the Commission estimates that Europe will need to add about 650,000 dwellings per year on top of the 1.6 million currently being built annually. Delivering the additional housing units would cost EUR 150 billion per year (see box 6.1**).** Building permits for new construction and renovations of residential buildings have declined by 22.2% since

2021([3]), signalling constraints on future supply. The EU housing stock increased from 218 million dwellings in 2010 to around 248 million by end-2024. In one third of the EU regions ([4]), construction did not manage to keep up with expanding demographic demand. [5]). Addressing this gap requires increasing housing supply, including better use of the existing building stock, to ease market pressure, particularly in areas of high demand. Improving transport connections and broadband infrastructure to enhance the viability and attractiveness of housing in rural areas could also help relieve pressure on urban markets, support balanced and sustainable development across the EU, and contribute to stabilising housing prices.

Key drivers of housing demand in Europe include economic factors like income, wealth, and interest rates. Economic factors influence households' purchasing capacity and housing market activity. Income and wealth are the primary determinants of purchasing power, while mortgage rates and credit conditions impact borrowing capacity. Institutional investors have become increasingly active in residential real estate markets.

Lack of investment in housing affordability and availability also impact stable and sustainable economic growth. Investments in housing reached a peak in 2007 and have been declining since in the EU. Housing remains the largest household expenditure item in many EU countries, and households had to cut back due to rising prices and rising interest rates. Rising house prices boost the wealth of homeowners but often force middle- and low-income households to choose between either accessing the housing market or prioritising other expenditures to cover housing costs. Worsening housing affordability and availability reduce labour- and educational mobility, weighing on economic growth, innovation, and competitiveness. In particular, high house prices and high new rents hinder labour mobility, acting as a disincentive for workers to move to dynamic economic regions. This aggravates labour shortages, especially of scarce skilled workers, and affects key workers such as teachers, emergency workers, healthcare professionals, and care staff.

Government expenditure on housing development is limited ([6]). Although government expenditure on housing development in the EU has risen in recent years, from 0.2% of GDP in

([3]) European Commission: Eurostat, 'Building permits – annual data', [sts_cobp_a], accessed 28/11/2025.
([4]) This refers to NUTS3 level regions, small regions with a population ranging from 150,000 to 800,000 inhabitants.
([5]) The investment gap is derived from the number of dwellings that would need to be built to fulfil future demand, and the corresponding investment cost, calculated using regional secondary market prices for flats. Investment need calculations are based on a bottom-up approach that combines information from the supply side (existing housing stock in units and square meters, house prices, and projected developments in the housing stock) and the demand side (demographic trends, the number and composition of households) at regional level (NUTS3).
([6])European Commission: Eurostat, 'General government expenditure by function (COFOG)', [gov_10a_exp], accessed 28/11/2025.

2015 to 0.7% in 2024, this increase has not been sufficient to meet the growing demand for affordable housing, particularly in the context of rising construction costs and the ongoing cost-of-living crisis. Meanwhile, government expenditure on social protection in the form of benefits in kind to help households cover housing costs has remained unchanged since 2015, at 0.3% of GDP.

Housing investment in the EU has declined after the 2008-2009 global financial crisis and despite a brief rebound, it plummeted again between 2022 and 2024. In 2024, housing investment accounted for 5.3% of GDP ([7]), varying widely across Member States. Households remain the primary investors, though their spending has decreased due to rising construction and financing costs. Institutional investors have expanded their role since 2013. Government expenditure on housing has increased in recent years but remains limited overall. After averaging around 0.2% of GDP before 2021, it rose to 0.4% in 2021 and reached 0.7% of GDP in 2023 ([8]). This increase comes largely from capital transfers ([9]), while regular investment - which accounts for about half of total government housing expenditure - has remained unchanged. EU programmes continue to provide targeted support for affordable, sustainable, and social housing.

Taxation and subsidies can also play a significant role in driving demand. Recurrent property taxes, transaction taxes, and VAT settings depress home prices and mobility, while subsidies, if not carefully targeted, can boost demand and prices without increasing supply. Golden visa and residence schemes have also channelled additional demand into property markets, lifting prices, particularly at the higher end.

Demographic trends like urbanisation, ageing and the tendency to more and changing household structures also increase housing demand. Population growth, driven by urbanisation and migration, correlates with rising house prices. Changing household structures and changing family structures lead to more and smaller household, greater demand for flexible living and smaller dwellings, while aging populations require accessible housing.

Financialisation can be one of the contributing factors to the deviation of house prices from economic fundamentals. Part of the housing stock in the EU is owned by institutional investors,

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([7]) European Commission: Eurostat, 'Gross fixed capital formation by main asset type' [nama_10_an6], accessed 28/11/2025.
([8]) European Commission: Eurostat, 'General government expenditure by function (COFOG)', [gov_10a_exp], accessed 28/11/2025.
([9]) In 2023, most of the increase in EU-level capital transfers for housing originated from Italy, where expenditure on energy-efficiency support schemes reached 2.1% of GDP in 2021 and 2.9% in 2023, largely due to the Superbonus programme. This exceptional spending substantially lifted the EU aggregate, while underlying government investment in housing remains modest across Member States.

attracted by the expectation of reliable returns. Institutional investment in EU residential real estate markets, including insurance companies, pension funds, credit institutions, private equity firms and non-financial corporations, has tripled over 2012-2020[10]. The increased presence of institutional investors in major European cities might have contributed to the deviation of the house price-to-income ratios from long-term trends, weakening the link between local housing markets and the underlying economic and demographic fundamentals. While empirical evidence in France, Ireland, Spain, Belgium, Greece and Bulgaria ([11]) suggests an increase in house prices, it is difficult to establish the direction of causality, i.e. if prices increase because of these investments or if these investments flow into these markets due to the expectation of house price increases. Official government and statistical sources generally do not differentiate between firms seeking short-term returns and more patient corporate owners. There is also limited research available on the impact of housing speculation and its economic consequences.

The share of Short-Term Rentals compared to the overall housing stock is particularly high and correlates with higher prices in some historical city centres and tourist areas. Short Term Rentals (STR) activity surged by nearly 93% between 2018 and 2024, but growth rates alone do not provide the full picture. STRs remain a valuable source of income for many people, and indeed many regions are looking to attract more tourism, including STRs in regions with less tourism infrastructure. The share of STR listings is overall estimated to represent around 1.2% in relation to the total number of dwellings ([12]), but this proportion is highly variable per country and even within regions and urban areas, with significant variance in STR distribution, with city centres of touristic cities having proportions sometimes as high as 20% of the dwelling stock linked to STRs in specific touristic hotspots and some areas of some EU cities, but diminishing rapidly towards the periphery of cities and to less than 1% in most of the respective commuting areas. A high concentration of STR does not automatically translate in housing shortages and higher prices but can be an aggravating factor. While the shortage of affordable housing is mainly attributed to other structural factors such as constrained supply, increases in STR activity have been associated with higher rents and house prices in several European cities.

The construction sector faces significant challenges in productivity, innovation, and labour shortages. The construction sector is one of Europe's largest industries, contributing significantly to employment and economic activity. Characterised by low technological integration, high labour intensity, and limited investment in R&D, productivity in the construction sector has declined. Construction costs have surged due to material price hikes, supply chain disruptions and energy

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([10]) Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, ECB Working Paper Series, No 3026, 2025, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3026~8b2199688d.en.pdf.
([11]) Banti, C. and Phylaktis, K., 'Are institutional investors the culprit of rising global house prices?' *Real Estate Economics*, Vol. 53, Issue 2, 2025, pp. 210-256, https://doi.org/10.1111/1540-6229.12514.
([12]) European Statistical System, 'Census Hub', European Commission website, accessed 27/10/25, accessed 28/11/25, https://ec.europa.eu/CensusHub/selectHyperCube?clearSession=true.

costs. Modern construction methods like modular and offsite manufacturing offer cost savings, faster delivery and environmental benefits. Digitalisation - including Building Information Modelling, digital twins, automated inspections, and interoperable digital permitting - constitutes a central productivity lever for the construction ecosystem. However, digital transformation remains underutilised as existing digital tools have not been scaled up. Labour shortages affect critical trades, exacerbated by an aging workforce and low youth attraction in combination with a need for advanced skills and at times poor working conditions in the sector ([13]).

Layers of overly restrictive housing standards and regulations substantially increase costs across design, compliance, and project delivery phases. Land use and zoning policies, building codes, and other requirements aim to preserve our safety and quality of life, to promote social and economic objectives, and to protect our environment and cultural heritage. But the multitude of requirements and procedures imposed by governments, regional and local authorities add layers of administrative complexity that delay implementation and inflate costs, resulting in unnecessary restrictions to the supply of housing where it is needed.

Spatial planning, zoning, and permitting processes are fragmented, time-consuming, and costly, significantly hindering housing supply. Spatial planning, zoning, and building permits vary widely across and within Member States, leading in some cases to complex regulations, excessive bureaucracy, and delays that can last from weeks to years. Some of these requirements go well beyond the scope of EU legislation, for example the decision to subject a small-scale urban housing project to a mandatory environmental impact assessment. In some cases, the capacity of subnational public administrations to deal with similar building permit procedures varies significantly ([14]). In most cases, requirements are unrelated to EU legislation, e.g. minimum number of parking places, minimum lot sizes, where a mailbox should be placed, heating in corridors and staircases, power sockets. Digitalisation remains uneven, with some countries advancing toward automated compliance while others rely on manual processes.

Land scarcity and high costs are major barriers to increasing housing supply in the EU. Land is a finite resource whose value rises in high-demand areas, particularly in cities, where regulatory and zoning restrictions limit availability. While only 3% of EU land is used for residential use, urban sprawl continues, even though the annual rate of land take slowed down since the early

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([13]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Employment and social developments in Europe 2023, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2767/089698.

([14]) European Commission: Directorate-General for Regional and Urban Policy, *Subnational reforms for the business environment: insights from the Subnational Business Ready reports*, Working Paper forthcoming.

2000s ([15]). Optimising land use through densification, adaptive reuse, and vacant building repurposing is crucial to addressing housing shortages, but regulatory hurdles and financial disparities between greenfield and brownfield projects complicate efforts to expand affordable housing.

Housing supply could be significantly boosted by better utilising and repurposing the existing building stock, particularly in areas where new construction is constrained. Nearly 20% of dwellings across the EU are unoccupied (including vacant units, seasonal homes, and underused properties ([16]) along with 9.7% of vacant offices, offering substantial potential to meet housing demand without new land development. To address potential trade-offs (e.g. renovation investments contributing less to net supply), strategies such as renovating vacant homes, subdividing large dwellings, offering help to tenants willing to resize (e.g. aging people willing to move to smaller dwellings) and repurposing non-residential buildings could increase supply while reducing adverse effects on affordability and ensuring net gains in housing stock and reducing the pressure on land use.

Addressing the housing affordability crisis inevitably implies expanding the building stock, but the environmental impact also needs to be taken into account. Construction and renovation activities account for about half of all extracted materials in the EU, contributing to greenhouse gas emissions and waste generation. The environmental impact of buildings in terms of waste and material use is concentrated during the construction phase, while most greenhouse gas emissions relate to the use phase of buildings. Land use in the EU is increasing due to urban sprawl, leading to loss of natural resources and environmental degradation. The most important environmental impacts at the end of a building's life are linked to the management of construction and demolition waste, including hazardous materials.

Housing affordability need not come at the expense of sustainability and quality over a building's lifetime. Investment in energy efficiency results in savings for households – such as lower energy bills– compensating for higher upfront costs. Every euro invested in energy efficiency translates into 12 euros in savings on energy costs over the lifetime of the investment in housing ([17]). Improved insulation, renewable energy, and smart systems lower lifetime energy bills

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([15]) European Environment Agency, 'Urban sprawl continues at the cost of nature in Europe', European Environment Agency website, 22/05/22, accessed 30/11/25, https://www.eea.europa.eu/en/newsroom/news/urban-sprawl-continues-cost-nature.

([16]) European Commission: Eurostat, Census 2021 round: 'Conventional dwellings by occupancy status, type of building and NUTS 3 region', (cens_21dwob_r3), 2021, accessed 11/11/2025.

([17]) Based on 27,000+ energy efficiency projects in EU27 in the DEEP database (see European Commission, 'De-risking Energy Efficiency Platform (DEEP)', European Commission: Directorate-General for Energy website, accessed 11/12/25, https://deep.ec.europa.eu/) and Eurostat electricity prices 2024 (see: European Commission: Eurostat, 'Statistics explained – Electricity price statistics', European Commission website, accessed 11/12/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics).

and enhance comfort. Challenges include grid constraints and the need for skilled labour, but long-term benefits include reduced emissions, lower operating costs, and better indoor air quality. Housing should also be of decent quality, i.e. provide safety, comfort, and health benefits, addressing risks like poor indoor air quality, extreme temperatures, and inadequate sanitation, which disproportionately affect low-income groups.

Poor housing conditions, inadequate safety measures, climate change and inadequate infrastructure exacerbate health inequalities and economic disparities. Dampness, pollution, exposure to noise, and structural hazards in substandard housing contribute to respiratory and cardiovascular diseases, mental health struggles, and developmental risks. Affordable housing is essential for social cohesion, preventing displacement and fostering diverse communities. Vulnerable populations, particularly in EU's outermost regions, face additional pressures from high construction costs due to high transport costs, climate vulnerabilities, and gaps in infrastructure and access to essential services. Fire hazards and outdated electrical systems endanger lives, while extreme weather events, such as floods and heatwaves, disrupt communities and strain resources. Nature-based solutions and energy-efficient designs can enhance resilience, but their implementation requires early investment and skilled labour. Meanwhile, unreliable infrastructure, like grid congestion and poor transport networks, drive up housing costs and deepens inequality, particularly in peripheral areas.

2. INTRODUCTION

Housing affordability has become a major concern across the European Union (EU). House prices have risen strongly. Since 2013, house prices in nominal terms have increased by more than 60% across the EU, growing faster than household income. Average rents have increased by around 20%, while new rents have increased significantly more. Around 40% of the urban population would need a mortgage of more than 20 years, requiring 30% of their average income, to buy a 25 m^2 apartment. Similarly, 30% of the urban population need to spend more than 30% of their average income to rent such an apartment ([18]). Waiting lists for social housing have increased. According to the latest national statistics, we have more than one million homeless people, of which 400,000 are children ([19]). Teachers and nurses, fire fighters and police officers, cannot afford to live in the communities they serve. 42 million Europeans cannot afford to heat their homes properly ([20]). Young people, particularly those of limited means, are forced to drop out of higher education and enter the workforce earlier than planned, delay starting a family, live with their parents or in overcrowded and substandard accommodation. Our ageing population is often left in oversized dwellings that do not match their needs.

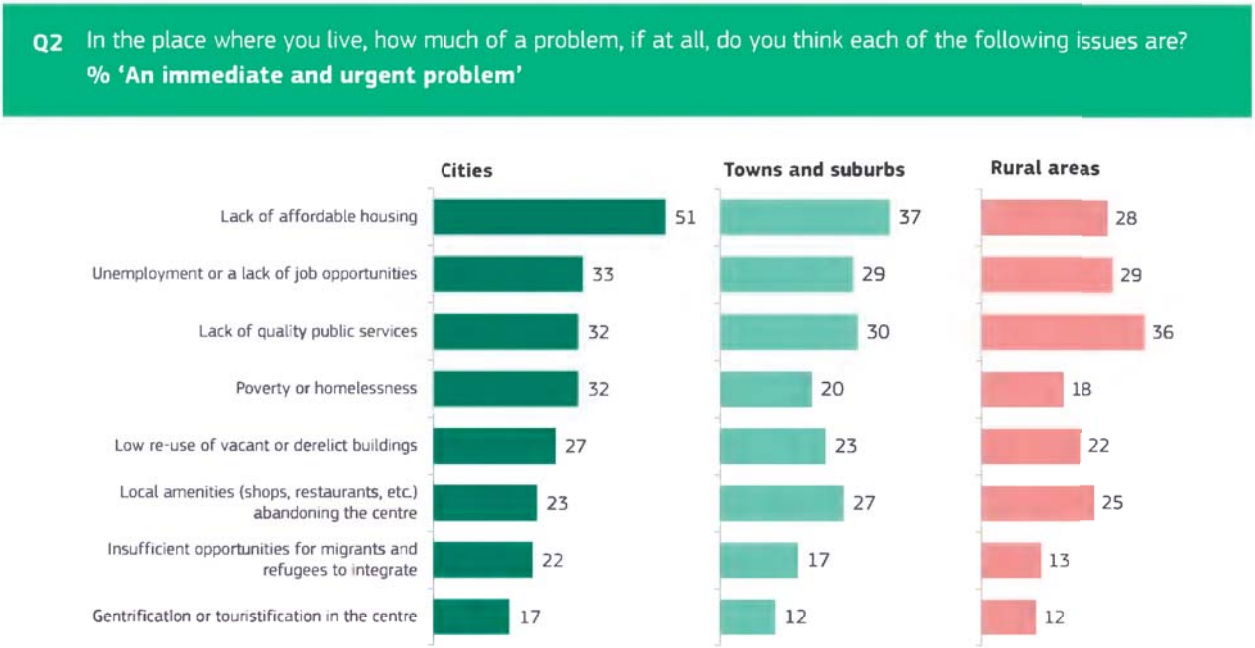
There are important differences between Member States, and Member State averages risk understating the crisis notably in stressed urban and touristic areas which face high housing stress due to high demand stemming from urbanisation, high levels of tourism, second home ownership and increasing financialisation. But they also hide the different challenges faced by depopulating rural areas: declining prices and a downward spiral of lower investment in social services and essential infrastructure.

Section 3 of this Staff Working Document examines the critical issue of housing affordability across the EU. Housing affordability is regularly assessed analysing the relationship between housing costs and household income, for both purchasing and renting. The SWD reveals that purchasing a home has become progressively more challenging over the past decade, with significant regional variations. Urban centres, attractive coastal regions, and the Alpine areas are identified as the most affected, where even individuals with medium incomes struggle to afford small apartments. Additionally, the rental market is characterised by a widening gap between new market rents and existing, often regulated contracts, particularly in urban areas, growth poles and highly touristic regions in high demand. This made rental markets "sticky", i.e. turnover is reduced

([18]) Sielker, F., Banabak, S., Gerhalter, M., Neuhuber, T., Sutterlütti, D. et al., *HOUSE4ALL: Access to Affordable and Quality Housing for All People. Final Report,* ESPON EGTC, 2025, https://www.espon.eu/publications/house4all-main-report.
([19]) Fondation Abbé Pierre-FEANTSA, 'Chapter 2 Children facing homelessness and poor housing a European reality', in: *Ninth overview of housing exclusion in Europe 2024,* 2024, https://www.feantsa.org/en/report/2024/09/19/report-9th-overview-of-housing-exclusion-in-europe-2024.
([20]) According to Eurostat (ilc_mdes01), in 2024 9.2% of the EU population was unable to keep their homes adequately warm 2024.

as tenants prefer to stay in the current place even if it does not meet their needs as new rent contracts are unaffordable. The section investigates how these challenges disproportionately affect newcomers to the rental sector, first-time buyers, and those needing to move, while existing homeowners and long-term renters are relatively less impacted. A growing share of the population in urban areas and growth poles finds it hard to secure a place to live, underscoring the need for targeted policies to address these regional disparities and mitigate the social and economic consequences of the housing crisis.

Figure 1: Lack of affordable housing most pressing issue for citizens in cities, towns and suburbs



Source: European Commission, 2025a.

Section 4 analyses the social, economic and environmental consequences of the housing crisis in Europe. The housing affordability crisis in the EU is severely impacting living conditions. Young people and vulnerable groups, such as children, people with disabilities, homeless, older adults, single parents, migrants, people at risk of discrimination and victims of domestic violence, are disproportionately affected by the housing crisis, facing disruptions in education, limiting access to employment opportunities, health problems, and social isolation. Housing unaffordability limits access to higher education and the job market, affects demographic trends, and strains pension, social, and health systems. It also hinders economic growth and mobility. Low-income households dedicate a large portion of their income to housing, which can exacerbate poverty. High house prices and rents reduce labour mobility, affecting essential workers and contributing to labour shortages and to an overall increase in wealth inequality. While expanding

the housing stock is necessary, it is crucial to consider the environmental impact, as construction activities contribute significantly to greenhouse gas emissions, waste generation, and environmental degradation.

Section 5 analyses the key drivers of housing demand such as economic and demographic fundamentals, investment channels and short-term rentals (STR). The demand for housing in the EU is influenced by a multitude of complex factors, including economic indicators, demographic trends, investment activities. Key economic determinants, such as income, wealth, mortgage rates, and credit conditions, significantly impact households' ability to purchase homes. Demographic fundamentals, including population growth, life expectancy, urbanisation, migration patterns, and the increase in single-person households, also shape housing demand by altering the number and types of dwellings required. Additionally, financialisaton, speculative investments, golden visa schemes and residence programmes can contribute negatively to housing market dynamics. Recurrent property taxation, transaction taxes, VAT settings, and targeted subsidies also play crucial roles in shaping housing transactions, ultimately influencing home prices. In a context of limited housing supply growth, the rise of STRs through online platforms further increases the pressure on the housing stock available for long-term rentals, particularly in urban and highly touristic areas.

Section 6 analyses supply constraints including declining investment, construction challenges, low levels of digitalisation, administrative inefficiencies, and land scarcity. Private housing investment has been falling, and public investment has been constrained for some time. In the last years, building permits hit historic lows. Construction sector productivity has declined due to low uptake of innovation and technology, rising material costs, and labour shortages especially in comparison to other manufacturing and the service sectors in the EU. Layers of regulation at EU, national, regional and local level, complex and lengthy planning and permitting processes, low levels of digitalisation and a lack of administrative capacity further delay residential projects and increase costs. Land scarcity and high acquisition prices limit new development, making brownfield redevelopment and better utilisation of vacant buildings important alternatives. However, regulatory hurdles and financial disparities between greenfield and brownfield projects complicate efforts to improve the supply of more affordable housing, leaving a significant supply gap despite EU funding for sustainable and social housing initiatives.

Section 7 describes the challenges to achieve a balance between affordability, sustainability, and quality in housing to also support public health, social stability, and climate resilience. Affordable, high-quality housing is fundamental to health, social cohesion, and resilience, as well as to progress on climate objectives. Urgent investment in energy efficiency and climate-proofing is needed to both mitigate and adapt to climate change. Although initial costs may be high, the long-term social, economic, and environmental benefits make such investments worthwhile. Poor housing conditions, such as mould, pollution, structural hazards, and fire risks, disproportionately

affect low-income households and can further constrain supply, while climate change amplifies these vulnerabilities, particularly in flood-prone and overheating urban areas. Strengthening the resilience of the housing stock is therefore an essential part of climate adaptation. Robust infrastructure is equally critical, as grid congestion, inadequate water systems, and poor transport connectivity exacerbate affordability challenges and deepen inequality. EU outermost regions face additional pressures from remoteness and extreme weather, requiring resilient, cost-effective solutions.

3. HOUSING AFFORDABILITY IN EUROPE

Assessing housing affordability requires a comprehensive analysis, using different indicators and differentiating at least between tenure, regions and socio-demographic and income groups. This section starts with a look into housing affordability definitions and which costs are to be considered (Section 3.1). It also includes a description of housing tenure developments in the EU, a key structural feature when assessing affordability (Box 1.1) while Box 1.2 collects data needs. Based on these fundamentals, the following sections dive into different affordability indicators and regional developments for purchase (Section 3.2), rental (Section 3.3) affordability, housing cost overburden and overcrowding rates (Sections 3.4 and 3.5).

3.1. Housing affordability: Definition and housing costs

Housing affordability is not usually defined in legal terms and typically describes the relationship between housing costs and household income, for both renting and purchasing. There is no universally agreed definition of housing affordability, and a wide range of definitions and measures are used ([21]). There's also a distinction to be made between upfront costs for buying and renting a property and running housing costs in a long-term perspective. Both are relevant to define affordable housing and are not limited to the costs of a property. To make an example, a flat with a relatively low rent but higher energy or maintenance costs or taxes would be comparatively less affordable than a flat with the same rent but lower ancillary costs. Expenditure ratios are common, such as the price-to-income and rent-to-income ratios. They express housing costs as a share of income or are translated in terms of affordability of dwelling size, for example how many square meters can be financed for a fixed share of income (typically 30 or 40%). Also, in case of ownership, the measure may reflect the years of income required to purchase a standardised dwelling or the share of income needed to repay of a mortgage loan with a fixed amount of years (typically max. 30) under current financing conditions. Another commonly used measure includes the housing cost overburden rate (set at 40% of income) which refers to the expenses associated with the right to live in a dwelling besides the purchase price or rent, including the cost of utilities such as water, electricity, gas, and heating (see Section 3.4). Other measures covering the social aspect of housings include housing deprivation and overcrowding rate as well as perceived financial burden of housing cost. It is important to point out that, in this context,

([21]) For more details, see Annex 1 in European Commission: Directorate-General for Economic and Financial Affairs, Frayne, C., Szczypińska and Vašíček, B., *Housing Market Developments in the Euro Area: Focus on Housing Affordability*, European Economy Discussion Papers, No 171, September 2022, Publications Office of the EU, Luxembourg, 2022, https://op.europa.eu/s/Aa3R and Sielker, F., Banabak, S., Gerhalter, M., Neuhuber, T., Sutterlütti, D. et al.,, HOUSE4ALL: Access to Affordable and Quality Housing for All People. Final Report, ESPON EGTC, 2025, https://www.espon.eu/publications/house4all-main-report.

housing affordability is understood as an overall policy goal, alongside availability, accessibility and quality.

For homeowners or homebuyers, some housing cost measures only include interest payments while others try to capture total financing costs. For homeowners or homebuyers, one has to distinguish between the cost associated with acquiring the dwelling and the costs associated with living in the dwelling and maintaining it. In the case of purchasing (homeownership), housing affordability can be assessed using cost of the one-time purchase prices ([22]) or alternatively using recurring cost of a mortgage and maintenance payments typically reported in household surveys. Mortgage payments are highly household-specific because they are determined by the chosen financing plan. Key factors include the agreed interest rate, the maturity of the loan and the proportion of own funds used as a down payment. Thus, for homeowners some measures only include interest payments on the mortgage principle. However, as mortgages usually cover only part of the costs, others estimate the total financing cost by using an interest rate on the total purchase price, capturing also foregone revenues on the own funds used for the purchase. In addition, extra fees for agents, registration and notaries as well as property transfer taxes are an important part of the costs associated with the purchase of real estate. However, due to limitations in the availability and level of detail of data, these additional costs are not always fully captured, even though they are part of relevant official statistics, such as gross fixed capital formation or the sub-index "Other services related to the acquisition of dwellings" of the Owner-Occupied Housing Price Index. In addition, different measures might be needed to differentiate between affordability of new buyers and long-standing owners (see Section 3.2). Finally, commonly used aggregated house price data hide significant cross-regional differences, and regional data, even if available, normally do not allow for a differentiation between variations within regions (e.g. inner city, outskirts, surrounding areas) or building quality, such as new vs. existing units, energy efficiency, and the standard of fittings.

For tenants, rent payments are used, but those hide important differences between new and existing rents as well as between market and subsidised rents. In the case of renting, costs are almost always periodic in European residential markets, with actual rent payments proxied by rent indices (e.g. the rent sub-index of HICP). However, these rent indices usually do not allow for a distinction between new and existing contracts, which is particularly important in regulated rental markets. While these indices are regularly dominated by the high share of old rent contracts that have risen only gradually, rents for new contracts might have increased to different levels. Thus, these indicators do not provide a sharp picture on what a household would need to pay in case of

([22]) Data on house prices can be based on advertised prices (offers), actual transactions (bank loan records or official registers), or household surveys. While studies show broadly similar trends between offer and transaction data, both have limitations. Offer data may be biased particularly in tight markets for example by low-quality listings, informal transactions, or missing offers from specific providers (e.g. non-profit). Transaction data is often more robust but not consistently available across countries.

moving and do not reflect the current tightness of the housing market in some locations. Similarly, indicators based on rent indices do not allow for a distinction between private and subsidised rents and might miss providing a useful measure for the tightness of the housing market (see Section 3.3).

Beyond rents and purchase costs, definitions differ concerning the inclusion of ancillary housing costs. Beyond rent or mortgage payments a wide range of additional costs (so called housing ancillary costs) might be included like maintenance expenses, utilities (electricity and heating/cooling), service charges, insurance fees and taxes. To this end, Eurostat defines housing costs as the monthly expenses associated with occupying a dwelling, including both owners and tenants ([23]). These costs are calculated net of any housing allowances and include utilities (water, electricity, gas, and heating), mortgage interest payments for owners, rent for tenants, structural insurance, mandatory services, regular maintenance, and taxes (see Section 3.4). Energy costs in particular are a significant factor in housing affordability because they represent a major, operating expense, and high energy burdens can disproportionately affect low-income households, leading to energy poverty. This has become more evident as energy prices have recently been driven by the consequences of the Russian war of aggression against Ukraine. Energy efficiency long-term savings are critical for affordability, can lower essential costs for vulnerable populations, and are crucial for preserving this housing stock. Even transport costs are sometimes discussed as part of housing affordability measures as households face a trade-off between higher housing costs in central locations with lower transport costs (both monetary and non-monetary, such as travel time) and lower housing costs in peripheral areas with higher transport costs.

Finally, income measures are imperfect measures to proxy the capacity to pay for housing. Normally disposable income is used to measure the capacity of households, i.e. gross income minus income taxes plus benefits, to pay for housing. International comparisons based on this indicator can be misleading given that social benefits in kind are different in each country: for example, education services are provided for free (at the point of use) in some countries, while households in other countries need to pay for those from their disposable income. Therefore, any comparison needs to be based on an internationally agreed, standard indicators such as the gross household adjusted disposable income ([24]). While wealth plays a decisive role in housing decisions, especially in relation to homeownership, it is difficult to measure it consistently within and across countries. Due to heterogeneity and limited data availability, wealth is therefore normally not included in the measurement of housing affordability.

([23]) European Commission: Eurostat, 'Statistics Explained – Housing cost overburden rate', European Commission website, accessed 30/11/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Housing_cost_overburden_rate.

([24]) European Commission: Eurostat, 'Statistics Explained – Adjusted household disposable income', European Commission website, accessed 30/11/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Adjusted_household_disposable_income.

Measuring affordability requires a comprehensive set of indicators allowing to differentiate between tenure status, regions and income groups. Among the available indicators to measure housing affordability there is no single indicator providing a comprehensive picture ([25]). In addition, it is key to use indicators that allow for a granular analysis. Firstly, tenure status differs widely across Europe. Measures focusing on rent affordability might be less relevant for countries with a high ownership rate. Thus, Box 1.1 analyses differences and trends in tenure across Europe. Second, national averages, blending rural areas with urban growth poles, can hide the urgency of the housing crisis in key regions. Thirdly, housing is not a uniform good, ranging from shared rooms to luxury villas, and income is not evenly distributed. It is therefore key to pay due attention to affordability for different income and age groups. However, there is no indicator that allows for a differentiation by tenure, region and income or age group at the same time. For example, some indicators are available at regional level, but they do not allow for a differentiation by income and age group. Conversely, indicators that include information on income and age groups (typically based on household surveys) regularly do not provide a sufficient number of observations for a representative regional analysis. Thus, in the following analysis various indicators are used.

Box 1.1 Tenure developments in the EU

Tenure structure in the EU is relatively stable with a high but slowly declining ownership rate ([26]). Around 70% of EU residents are owners and 30% tenants; owners without a mortgage remain the largest group (~44% in 2024). Since 2014, the share of mortgaged owners fell slightly (from 25.6% to 24.3%), while tenants at market rent rose (from 19.5% to 21.1%), and tenants at reduced price or free housing rose marginally from 9.8% to 10.5%. The largest increase since 2014 in market-rent tenants was observed in Malta (+18.8 pp), and Finland (+19.2 pp). The Netherlands is the outlier, with a −27.3 percentage points drop in market-rent tenants offset by a +25.5 percentage points rise in reduced/free-rent tenants, underlining how tight regulation of the rental market can affect landlords' willingness to let their properties and shrink the private rental market ([27]).

Home-ownership rates across EU countries range from 50% to 90%. Country differences in tenure are large: home ownership exceeds 90% in countries such as Romania, Slovakia, Hungary and Croatia, versus less than 50% in Germany, reflecting historical trajectory of state and municipal housing construction and privatisation, local tax policies, rental-market regulation, and culture-related preferences. Since 2010, homeownership has declined in 21 of 27 Member States, with notable decreases in, Germany, Malta, Greece, Spain, Finland,

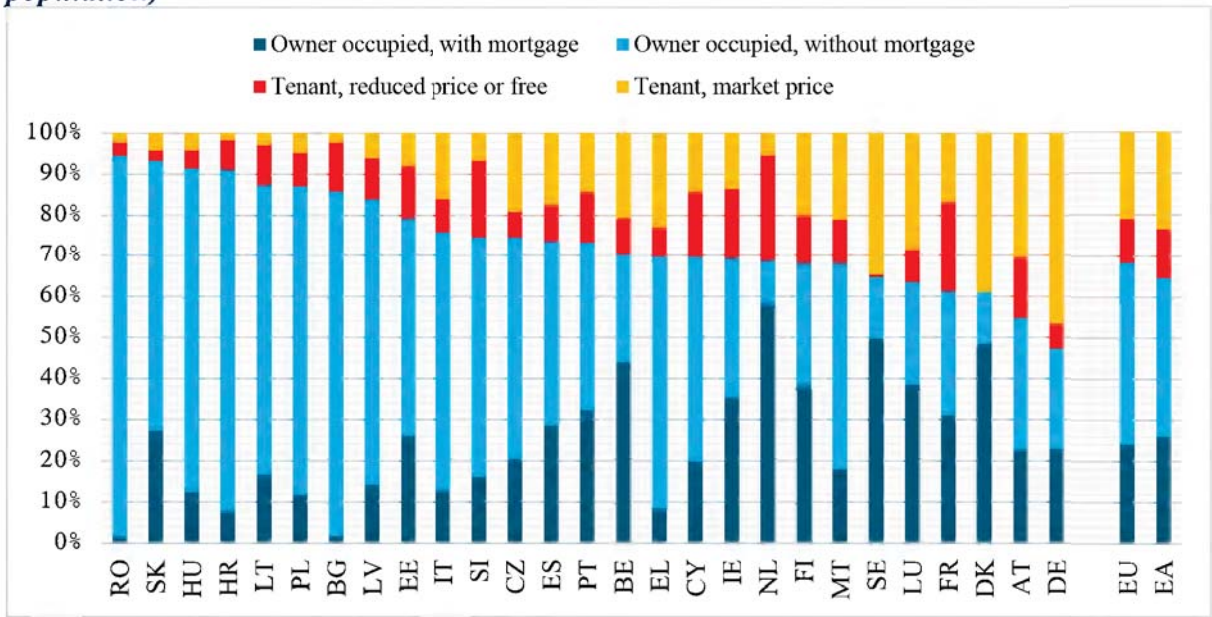
([25]) An indicator regularly used is the housing cost overburden rate. See Section 1.4.

([26]) European Commission: Eurostat, 'Distribution of population by tenure status, type of household and income group', [ilc_lvho02], accessed 30/11/2025.

([27]) Rabobank,'Kwartaalbericht Woningmarkt', Rabobank website, 04/09/25, accessed 30/09/25, https://www.rabobank.nl/kennis/d011497025-kwartaalbericht-woningmarkt-veel-woningverkopen-en-aanhoudende-stijging-huizenprijzen.

Luxembourg, and Denmark, while it has increased in Italy, the Netherlands, Slovakia, Croatia, Hungary, and Poland.

Figure 2: Distribution of Member State populations by tenure status, 2024 (% of population)



Source: Eurostat (ilc_lvho02), accessed 22/09/25.

Box 1.2 Key Housing Data and Data Needs

This box provides an overview of the current state of housing statistics in the EU, highlighting where data is lacking, where existing sources can only partially inform policy, and where ongoing or planned work aims to improve coverage and harmonisation. In some areas, such as homelessness, granular prices, social housing stock, and residential building activity, data is scarce, difficult to collect, or not yet comparable across Member States—these represent the highest-priority gaps for targeted policy action. For other topics, including broader housing market metrics, affordability, and access to services, existing datasets and planned initiatives allow for feasibility studies and gradual improvements. This section first describes the role of European statistics and key sources, followed by thematic sections outlining data needs, current availability, and limitations for each priority area, including population and housing censuses, housing prices and costs, housing supply and stock, household finance, and social housing. This structure highlights both immediate gaps and longer-term plans for developing a robust, harmonised evidence base to support EU housing policy. Improvements in statistical and administrative data could form the foundation of a future European Housing Data Space, providing harmonised, interoperable datasets for evidence-based policy.

The production of housing statistics in Europe is a collaborative effort within the European Statistical System (ESS), governed by Regulation (EC) No 223/2009 and the European Statistical Programme (Regulation EU 2021/690). This framework ensures that statistics are high-quality, comparable, and timely across all EU Member States.

In November 2025, Eurostat launched a dedicated landing page on EU Housing statistics, complemented by a section in Eurostat's online database. The platform provides both overview information and detailed datasets, supporting policymakers, researchers, and stakeholders in monitoring housing conditions and affordability trends across the EU.

Key international partners, including the Organisation for Economic Co-operation and Development (OECD) and the United Nations Economic Commission for Europe (UNECE), play an important role in harmonising methodologies and sharing best practices. For example:

- The OECD Affordable Housing Database provides cross-country indicators on housing market, housing conditions, affordability, and policies towards affordable housing (OECD Affordable Housing Database).
- The UNECE Housing2030 initiative offers policy recommendations and guidance for affordable housing strategies in the region.

This collaborative framework ensures that the EU has a robust evidence base to support policy development, monitor housing challenges, and assess the impact of initiatives under the European Affordable Housing Plan (EAHP).

European official statistics provide the foundation for designing, monitoring, and evaluating EU policies. They ensure comparability across Member States, enable targeted interventions, and support decision-making at national, EU, and euro-area levels. Harmonised data on demographics, households, income, social conditions, and economic activity underpin social and economic policy, allowing policymakers to assess needs, measure outcomes, and identify emerging risks.

Housing has long been recognised as a critical factor in social inclusion, economic stability, and quality of life. Traditionally, EU housing policy focused on social aspects, including living conditions, affordability, homelessness prevention, and access to adequate housing. However, demographic shifts, urbanisation pressures, climate challenges, and rising housing costs have expanded the policy agenda to include economic and financial dimensions.

As a result, a comprehensive approach to housing statistics is required, integrating information on housing supply, demand, market dynamics, and household financial conditions, to support evidence-based policymaking across the full spectrum of housing challenges.

Key sources include:

- European statistics on population and housing (ESOP): Censuses on population and housing, conducted every ten years, provide detailed information on location, age, sex, household composition, housing conditions, and social characteristics. The forthcoming ESOP framework (Regulation starts to apply on 1 January 2028) ensures harmonised methodologies across Member States will provide more frequent and granular data on

housing-related variables, including detailed geographical breakdowns (NUTS3, LAU, DEGURBA) and support planning and monitoring of housing demand and conditions.

- EU Statistics on Income and Living Conditions (EU-SILC)): Offers cross-sectional and longitudinal data on income, poverty, social exclusion, housing difficulties, access to services, and housing cost burdens. About 90% of data are collected annually, with additional ad hoc modules every 3–6 years. Data are transmitted according to EU legislation, and over 300 variables are used to produce policy-relevant indicators. Common breakdowns include age, sex, household type, income quintile, poverty status, disability, and degree of urbanisation; regional data (NUTS2) are available for some indicators.

- Price Statistics:
  - Inflation and Housing Costs:
    - HICP (Harmonised Index of Consumer Prices): EU's standard measure of inflation. Housing costs, including rents, are a key component and support ECB monetary policy and monitoring of housing affordability. The HICP sub-index for rents draws on national statistics for private and, where relevant, social rentals.
    - Household Budget Survey (HBS): Provides national data on household consumption expenditure often on annual basis. HBS 2026 will be fully harmonised under Regulation (EU) 2019/1700, ensuring comparability across countries. Remaining divergences include treatment of owner-occupier imputed rent in certain countries (e.g., Czechia, Malta, North Macedonia, UK). Eurostat provides guidance to improve consistency.
  - House Price Index (HPI): Measures price changes for all residential properties purchased by households, including flats, detached, and terraced houses, both new and existing. Self-build dwellings are excluded; land is included. Available annually and quarterly (index 2015=100) in nominal and deflated terms (using national accounts consumption deflators). Coverage is near-complete, with all EU Member States except Greece reporting.
  - Owner-Occupied Housing Price Index (OOHPI): Follows the net acquisitions approach, capturing prices paid by owner-occupiers for dwellings newly acquired by the household sector, including related ownership costs. Disseminated quarterly; reported by all EU Member States except Greece.
  - House Sales (HS): Provides number and value of transactions for newly built and existing dwellings purchased by households. Reporting is voluntary, with 15–21 EU Member States providing data. Annual and quarterly tables include indices, rates of change, and shares of total transactions.
  - Housing Taxation Database and User Cost of Owner-Occupied Housing (UCOH): Collects comparable time series on the main features of home ownership taxation and the user cost of housing investment in the EU. It includes information on transfer taxes, capital gains taxes, imputed rent taxation, mortgage interest tax relief, and house prices

1. Priority data needs for housing policy: current availability and gaps

1.1. Homelessness prevalence and typology

The current European Statistical System (ESS) framework does not provide a comprehensive figure for homeless persons, as data availability and quality vary widely across Member States due to differences in definitions and data collection methods. While the European Typology of Homelessness and Housing Exclusion (ETHOS Light) provides a classification framework, its application across the EU remains incomplete.

Accurate and reliable data collection at the EU level is particularly challenging because homeless persons are often absent from household surveys and from administrative registers and difficult to reach. Effective collection therefore requires measures beyond conventional statistical tools, including the combination of different methods to monitor the various types of living situations, the involvement of all relevant services and stakeholders in the data collection process, and enhanced security for data collectors and targeted psychological training.

Existing sources provide only partial coverage. EU-SILC captures past experiences of homelessness and some current homelessness within conventional housing, while population censuses provide limited information. The forthcoming ESOP Regulation may improve the frequency of data collection, but detailed breakdowns will remain unfeasible in the short term. Consequently, EU-wide monitoring of homelessness remains fragmented, infrequent, and incomplete, limiting the capacity for targeted interventions and robust policy evaluation.

Significant gaps persist in obtaining comparable, systematic data on sex, gender identity and expression, sexual orientation, age, racial or ethnic origin, disability, health status or other characteristics useful to understand the processes leading to homelessness, as well as on the different living situations of homeless persons, including rough sleepers, residents of temporary shelters, and those engaged in "sofa surfing."

1.2. Social housing stock and flows

Reliable and harmonised data on the size, number of people accommodated, waiting time, composition, and evolution and quality of the social housing stock are essential for assessing housing availability and fiscal sustainability. Key information needs to include the number of social housing units, total floor area, annual additions and removals, and improvements related to energy efficiency. Some OECD and some Eurostat statistics exist, but despite efforts, notably by the OECD and Eurostat, current coverage remains incomplete and not fully harmonised across Member States.

The OECD Affordable Housing Database provides the most complete cross-country information, but it is updated infrequently and relies on national definitions that differ substantially. Within the European Statistical System, social rentals are included in the Harmonised Index of Consumer Prices (HICP) sub-index for rents where relevant. Ongoing

Eurostat work on commercial real estate statistics may expand coverage, including social rentals, although a separate breakdown for this category is not yet planned.
The EU Statistics on Income and Living Conditions (EU-SILC) include an annual variable distinguishing between market rent, partially-, and fully subsidised rents, allowing identification of households benefiting from housing support, including housing allowances. This information could be further combined with data on dwelling size (collected every three years) and relevant socio-economic characteristics to derive more detailed indicators.

1.3. Housing prices, rents, and market metrics

EU-wide index-based series, such as the *House Price Index, Owner-Occupied House Price Index*, *User Cost of Owner-Occupied Housing* and the *Harmonised Index of Consumer Prices* for rents, are compiled at the national level and provide essential information on trends over time. These indices support monitoring of affordability, inflation, and rental market dynamics, but they do not fully capture the heterogeneity of housing markets, including differences between new and existing rental contracts, property types, or detailed territorial levels (e.g., NUTS 3, degree of urbanisation – DEGURBA, capitals, and Functional Urban Areas – FUA). Key gaps include consistent EUR per m² by dwelling type, construction quality, plot utilisation, allowed height, net additions, social housing coverage, rent and price distributions, cadastral values, neighbourhood characteristics, and higher-frequency data (monthly or quarterly). Complementary six-yearly EU-SILC modules capture renting difficulties and provide socio-demographic breakdowns by age, sex, income, household composition, and country of birth. While these data are valuable for understanding affordability pressures, they cannot provide the level of detail needed for continuous market monitoring.
Data on absolute housing prices and rents, expressed in EUR per m², including distributions (percentiles) and detailed sub-national breakdowns, are critical for assessing affordability, regional disparities, and policy targeting. Currently, level data are available in only a limited number of Member States and remain largely unharmonized. Detailed breakdowns by contract type, property type, or fine regional granularity are limited, though methodological guidelines for such data are planned for development in 2026. Expanding coverage of absolute price and rent levels would complement index-based indicators, enabling more precise monitoring of housing costs and affordability pressures across the EU. The use of alternative data sources, such as web listings—which Eurostat is currently exploring—could further improve timeliness, frequency, and granularity of these indicators.

1.4. Housing construction, stock and transactions

Comprehensive data on construction, housing market activity, and dwelling stock, including the number of homes built, demolished, sold, or otherwise changing hands, is essential to assess housing supply potential and social inclusion. This includes information on construction costs, effective buildable area, dwelling type, age, energy efficiency, and size distribution. Equally

important is sub-national information on crime rates and the clustering of vulnerable households, which supports the analysis of inclusion, segregation, and policy impact.
Key gaps exist in detailed metrics at fine territorial levels (NUTS 3, degree of urbanisation – DEGURBA, capitals, and Functional Urban Areas – FUA), including higher-frequency data (monthly or quarterly). Detailed construction and stock data remain limited, as business and structural statistics generally report only "construction of buildings" without distinguishing residential from non-residential projects, given that enterprises and workers often engage in both. Housing completions are not systematically available at EU level.
Multi-annual and decennial data from the European Statistics on Population and Housing (ESOP) framework provide more granular dwelling information, including geographic breakdowns, but only periodically. Neighbourhood and spatial characteristics are partially captured through EU-SILC modules, collected every three years as part of the 'Labour Market and Housing' module. These include indicators on pollution, grime, crime, violence, and vandalism, disseminated by degree of urbanisation. Some Eurostat and city-level surveys provide additional coverage on local amenities and dwelling density.
Harmonised sub-national data on social housing locations and the clustering of vulnerable households remain incomplete, while coverage of rent and price distributions at these levels is addressed in separate sections on housing affordability and market indicators.

1.5. Population and housing census data

Population and housing censuses provide comprehensive demographic and housing information at decennial intervals, with recent waves conducted in 2011 and 2021[28]. They are essential for understanding population composition, housing stock, and broader demographic trends. The decennial housing census delivers detailed information on dwelling characteristics, including occupancy and density. The forthcoming ESOP framework will introduce multi-annual collections, conducted three times per decade, improving frequency, timeliness, and content, including information such as energy performance class. These legally mandated EU-level collections ensure harmonisation across Member States, underpin social statistics, and support the construction of samples for other EU-wide surveys, such as EU-SILC.
Data on access to education, healthcare, transport, and other essential services are critical for assessing social inclusion and territorial disparities. EU-SILC provides relevant indicators through modules such as the Labour Market and Housing module (collected every three years), capturing satisfaction with the dwelling and neighbourhood quality. While these modules offer valuable information, timeliness and granularity remain limited. Disaggregation by socio-economic status or small territorial units may be insufficient, and certain population groups, particularly in remote or deprived areas, may be underrepresented. The multi-annual ESOP collections are expected to improve the coverage, frequency, and detail of such indicators.

([28]) European Statistical System, 'Census Hub', European Commission website, accessed 27/10/25, accessed 28/11/25, https://ec.europa.eu/CensusHub/selectHyperCube?clearSession=true.

Linking household income to housing costs is essential to assess affordability and inform financial support policies. EU-SILC captures key variables through the Labour Market and Housing module (every three years) and the six-yearly Over-indebtedness, Consumption and Wealth module (next in 2026). These modules cover total energy costs, imputed rent, financial burden of housing, and remaining mortgage repayments. Eurostat publishes indicators on the share and burden of housing costs (ilc_mded01–05), while the Household Budget Survey (HBS) provides complementary data on housing and utility expenditure. The 2026 HBS will expand coverage to include the value of the main residence, mortgage repayments, and detailed energy and maintenance costs. The ongoing improvements aim to enhance granularity, include additional cost components, and provide more frequent and comparable EU-wide statistics.

1.6. Household finance data

European Central Bank (ECB) data, notably the Household Finance and Consumption Survey (HFCS), provide detailed information on household assets, liabilities, income, and housing wealth. These data are primarily used to monitor financial stability and inform monetary policy, particularly regarding household debt and credit risk. While coverage is largely national, the HFCS could complement other datasets on social housing, housing costs, and affordability, offering deeper insights into housing market dynamics. Key gaps include limited sub-national granularity and the absence of integrated affordability metrics.

1.7. Mortgages and financing conditions

Harmonised EU data on mortgage characteristics—such as loan-to-value ratios, debt-service-to-income ratios, maturities, interest rate fixation, and borrower profiles—is essential to link housing finance with affordability and financial stability. Currently, comprehensive mortgage flows and stock data disaggregated by income, age, and household type are missing, and standardised templates for consistent cross-country comparability are lacking.
The EU-SILC module on "Over-indebtedness, Consumption and Wealth" provides information on household loans and debts. This dataset could potentially support the development of additional mortgage-related indicators, including disaggregation by income, age, and household type. However, it does not fully cover all mortgage-specific variables, and data are collected only periodically.
Key gaps remain in sub-national granularity and integrated affordability metrics. Additional missing information includes turnover rates, buyer characteristics, and detailed financing indicators such as loan-to-value ratios, debt-service-to-income ratios, and mortgage maturities.

3.2. Affordability for homeowners and buyers

Over the last decade nominal house prices have grown strongly across the EU-27. Since 2000, house prices have nearly tripled in nominal terms across the EU. First, there was strong growth in

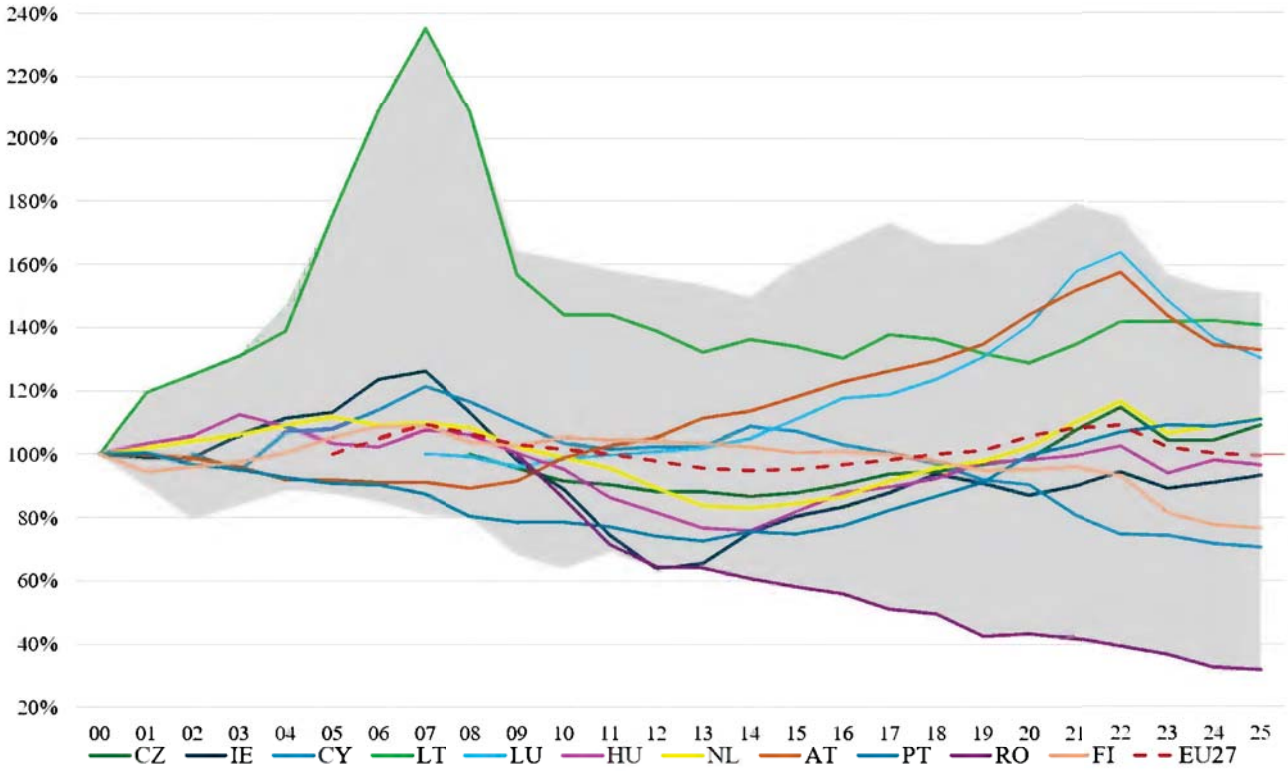
the run-up to the global financial crisis of 2008, accompanied in many Member States by a mortgage-credit boom, and in some cases also by a construction boom. During the financial crisis and euro area debt crisis, prices declined strongly in some countries, putting a strain on highly indebted households, while other countries experienced smaller or negligible corrections. House price growth resumed across the EU around 2014 and accelerated during the pandemic, fuelled by income support, low borrowing costs and household savings as well as demand pressures from both internal and external migration, while supply constraints worsened from labour shortages and high input costs. From 2022, price growth eased, with the rise in interest rates making mortgage financing more expensive, leading to reduced demand. Since 2024, house prices have resumed their upward trend, underpinned by persistent supply shortages that suggest continued pressure in the years ahead. Overall, these price developments reflect increasing demand (see Section 3) in combination with rising land and construction costs (see Section 4). The magnitude of all these developments varies strongly across countries, within countries and by market segments.

In real terms, house prices rose strongly until 2022, before moderating as inflation accelerated. In housing policy debates, increases in nominal house prices are often used as an indicator of market pressure. In turn, real house prices, adjusted for overall inflation, show whether housing costs rise faster or slower than living costs and better reflect the relative price of housing and specific housing market dynamics and pressure. The comparison of both indicators shows substantial divergence: in several Member States, real house prices have more than doubled since 2010, while in others the increase has been modest or even negative. This highlights the heterogeneity of housing market dynamics within the EU when inflation is taken into account, and the dual role of inflation in housing price measurement, as it serves both as a determinant of price developments and as a benchmark for assessing nominal house price increases. As a determinant, higher inflation and interest rates are associated with higher house prices relative to rents (see, for example, DiPasquale and Wheaton, 1996). To complicate matters further, house prices themselves play a crucial yet complex role in the measurement of inflation, particularly the role of owners-occupied housings costs.

Across the EU, price growth has been stronger than income growth, lowering affordability for prospective buyers, with marked differences across countries. While real house prices capture the changes in purchasing power, price-to-income (PTI) ratios compare the change in house prices to the changes in household disposable incomes and are a measure of the housing affordability for buyers. House price growth started outstripping income growth in 2016, and the gap between the two increased sharply over the pandemic, with some correction recorded in the last years. There are substantial differences between countries. The strongest increases in PTI ratios over the last decade experienced Portugal, the Netherlands, Hungary, Luxembourg, Ireland, Czechia and Austria, with PTI ratios more than 20% higher than a decade ago. Conversely, some countries, such as Romania, Cyprus and Finland have seen house prices fall relative to incomes since 2014. This decline is even more marked going back to 2007 for most central and eastern

countries catching up and experiencing strong economic and income growth, particularly Bulgaria, Latvia, Poland and Lithuania (
Figure 3).

Figure 3: House price-to-income ratio, EU Member States (2000 = 100)



Source: European Commission: DG Economic and Financial Affairs, 2025, own calculations based on Eurostat data.
Notes: Price to (adjusted disposable) income (per capita) ratio, standardised, earliest available year used if data for 2000 are missing. The grey band represents the complete distribution of indicator values (e.g., severe housing deprivation) across the 27 EU Member States for each year. It highlights the minimum and maximum values recorded among Member States, with all other national observations situated within this range. Selected Member States are highlighted within this range, alongside the EU27 average.

Because most households need to borrow to buy a home, the sharp increase in interest rates in 2022 has markedly reduced housing affordability in recent years. In the EU, home purchases are usually financed with a mortgage. For these households, affordability is not determined only by the purchase price relative to income (the PTI ratio); it also depends on the total cost of the mortgage, especially the interest payments. Higher interest rates have reduced the amount that households can borrow – as reflected in the Commission's estimates of household

borrowing capacity ([29]) – even though some countries have seen sizable income growth that partially offsets this effect. Consequently, households relying on mortgages have experienced a decline in affordability in almost every EU country since the interest rate normalisation in 2022. Prospective buyers have faced higher house prices, which in many markets have risen faster than incomes for more than a decade, and, in recent years, they have also confronted sharply higher mortgage-funding costs. This has been well reflected in a dramatic decline of new loan for house purchases that occurred since 2022. Country-level figures that are based on average house-price levels and median incomes hide substantial heterogeneity across regions, age groups, and income quintiles. A significant share of prospective buyers targets homes in proximity to major cities in urban areas due to employment opportunities, where price levels are higher compared with national averages. These buyers tend also to be younger than the national average (typically young families), so with an average income their purchase affordability is lower than the aggregate national numbers suggest. At the same time, underdeveloped rental market often does not provide a viable alternative (see the Section 3.3).

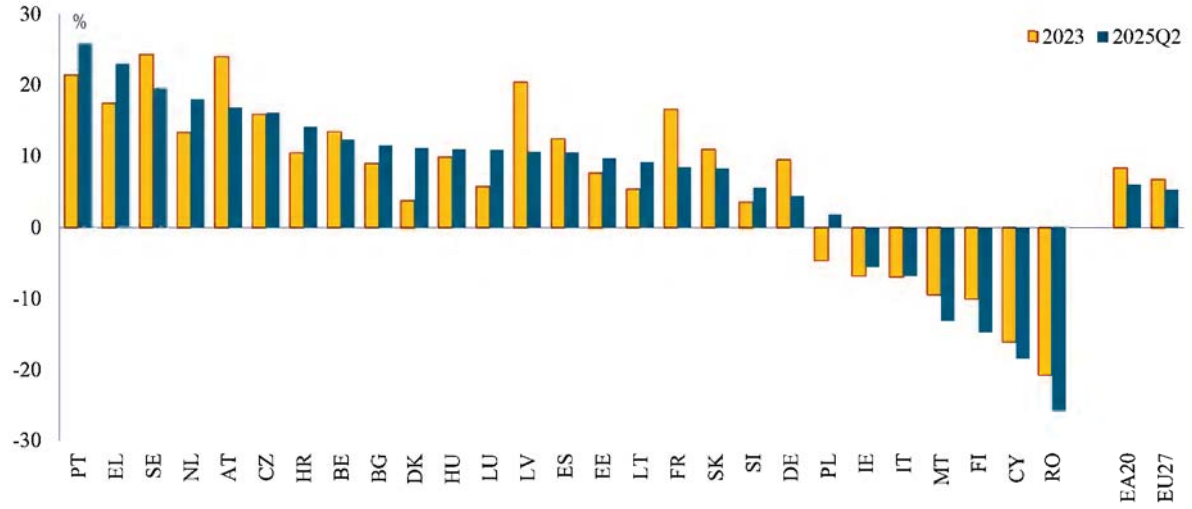
Existing homeowners with variable mortgage rates are being squeezed from higher financing cost and potential loss from house price correction. When interest rates rise, the monthly mortgage payment typically increases, especially for the sizeable share of loans with variable rates or with fixed rates for only a short period, which are common in several Member States such as the Baltics, Finland, and Cyprus. At the same time, corrections in house prices imply that owners could incur a loss if they try to sell, locking them into negative-equity positions and discouraging mobility. Nevertheless, the recent correction in house prices has been relatively contained despite higher financing costs. In the euro area, the household non-performing-loan (NPL) ratio has remained stable, generally fluctuating between 2.1 % and 2.3 % in recent years.

Various valuation measures indicate that house prices are overvalued in several EU countries, entailing a risk of house price corrections. There are different measures for assessing if a housing market is overheated, i.e. if house prices are excessively high. Overvaluation constitutes a double-edged phenomenon. For incumbent homeowners it generates a transitory increase in equity that can be exploited; however, it also induces risk of house price correction. For prospective purchasers, the overvaluation erects a substantial obstacle to market entry, worsening affordability. However, overvalued house prices are not a guarantee that they will decline – and if so, how quickly –, if there is a structural gap between housing demand and supply. Institutions employ a diverse array of methods to evaluate housing markets, reflecting the complexity and variation in housing market dynamics. The Commission estimates for house-price valuation gaps are derived from price-to-income, price-to-rent and the regression valuation model

([29]) For more details, see Box 1 in European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, https://op.europa.eu/s/Aa3S.

are averaged to estimate an overall valuation gap at country level. House prices have recently declined most strongly in countries where they were most overvalued such as Luxembourg or Sweden. According to the latest available data, house prices remained overvalued in several EU countries in the 2nd half of 2025. The Commission estimates that the average overvaluation is the most substantial in Portugal at around 25%, as can be seen in Figure 4, overtaking other overheated housing markets in Sweden, Austria or Latvia. House prices are estimated to be overvalued in the range of 10 and 20% in Luxembourg, the Netherlands, Austria, Greece, Czechia, Sweden and Latvia, although the estimated overvaluation decreased in all these countries, except for the Netherlands, in 2024. The current housing market trend is expected to continue in 2025 and increase overvaluation in several Member States.

Figure 4: Average housing overvaluation, 2023- 2025Q2([30])



Source: European Commission: DG Economic and Financial Affairs, 2025, own calculations based on ECB and Eurostat data.

***Notes*:** Except for the ECB overvaluation gap for EA20, EA20 and EU27 figures are weighted averages of country figures (HICP 2023 weights). ECFIN average overvaluation is the difference in percentage points between observed house prices and house prices justified by fundamentals and is computed as an average of three metrics (model based, price-to-income ratio and price-to-rent ratio). See Philiponnet and Turrini (2017).

Assessing housing markets on regional level, low purchase affordability is observed in large metropolitan areas, particularly capital cities, as well as coastal areas and Alpine regions. A

([30]) For more information housing overvaluation, please see also: European Commission, *Alert Mechanism Report 2026*. Commission Staff Working Document, SWD (2025) 956 final, Strasbourg, 2025, https://op.europa.eu/s/Aa6i.

new data set allows assessing housing markets on regional level. HOUSE4ALL calculations ([31]) (combine real estate listings (2024–2025, web-scraped) with local income data from Mikou et al. (2024). While this data set also has some shortcomings ([32])and does not allow for an analysis over time, findings are aligned with other market-oriented benchmark studies such as the Deloitte Property Index ([33]), ESPON HOUSE4ALL maps regional purchase affordability, expressed as the number of square metres affordable when spending one third of average annual income on a 30-year mortgage. The map highlights spatial disparities, with affordability generally higher in rural and peripheral regions, as well as much of inland Spain, Portugal, and parts of Scandinavia. In turn, purchase affordability is particularly low across most regions in Central and Eastern Europe (Poland, Slovakia, Hungary, Romania, Croatia), as well as in Greece and Portugal. Generally, affordability is low in capital cities, coastal regions, and the Alpine region, with unaffordable clusters visible (

Figure 5). In various of these regions, not even a 30-year mortgage duration is enough to buy a 30m^2 apartment. This is the more problematic as close to 50% of the EU population lives in cities

([31]) Sielker, F., Banabak, S., Gerhalter, M., Neuhuber, T., Sutterlütti, D. et al., HOUSE4ALL: Access to Affordable and Quality Housing for All People. Final Report, ESPON EGTC, 2025, https://www.espon.eu/publications/house4all-main-report.

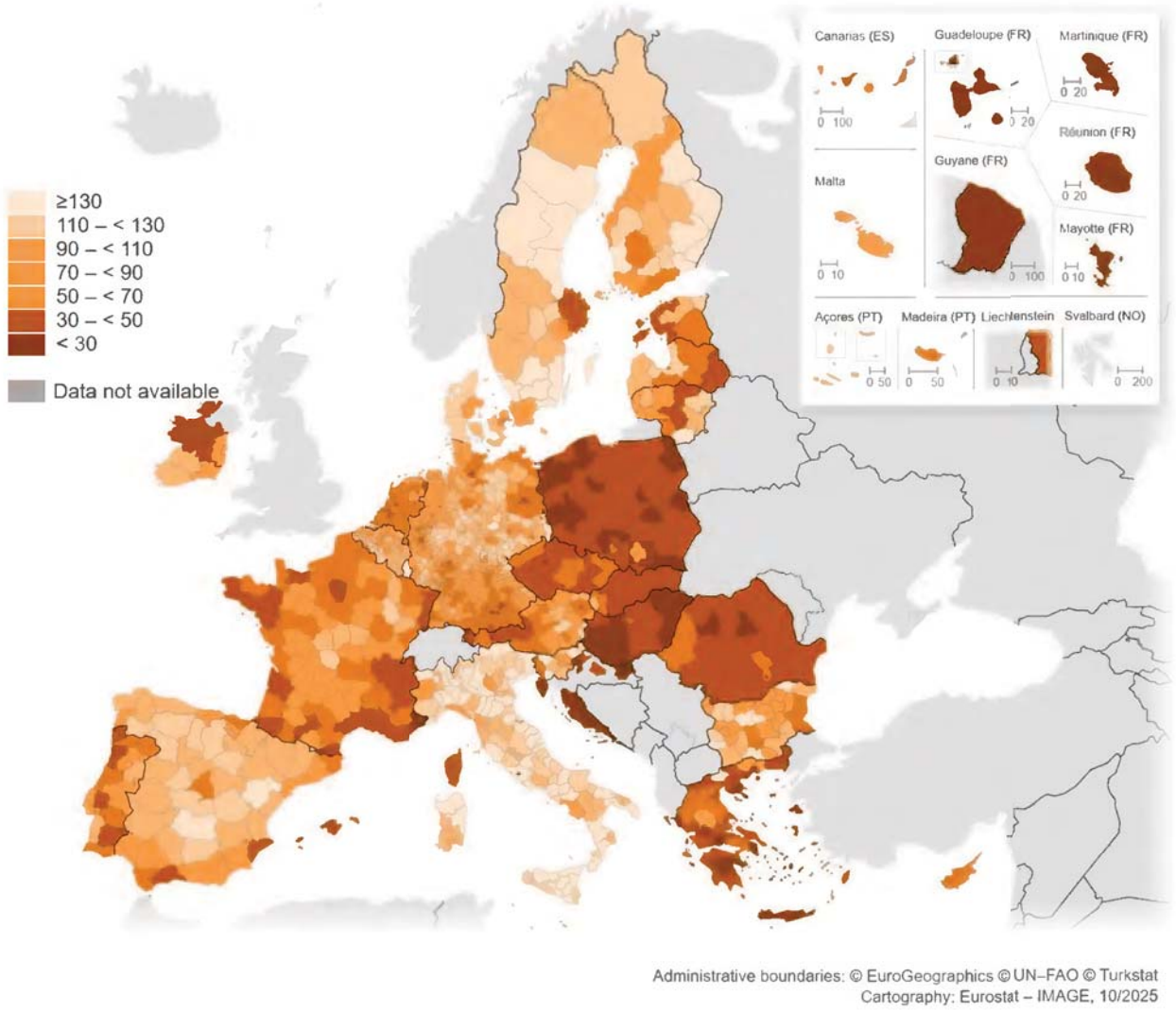
([32]) Sielker, F., Banabak, S., Gerhalter, M., Neuhuber, T., Sutterlütti, D. et al.,, *HOUSE4ALL: Access to Affordable and Quality Housing for All People. Final Report,* ESPON EGTC, 2025, https://www.espon.eu/publications/house4all-main-report.

([33]) Deloitte, *Property Index*, Overview of European Residential Markets, 14th edition, August 2025, https://www.deloitte.com/content/dam/assets-zone2/cz-sk/cs/docs/services/financial-advisory/real-estate/property-index/2025_ADV_Property-index_online_22082025.pdf.

and the trend of urbanisation continues. In some cases, the results of low purchase affordability in almost all regions in a country (e.g. Poland) may reflect the level and quality of regional income data rather than housing price peaks ([34]).

Figure 5: Regional purchase affordability (m^2 that can be bought via mortgage using 1/3 of disposable income)

([34]) For specific challenges in outermost regions see Section 5.

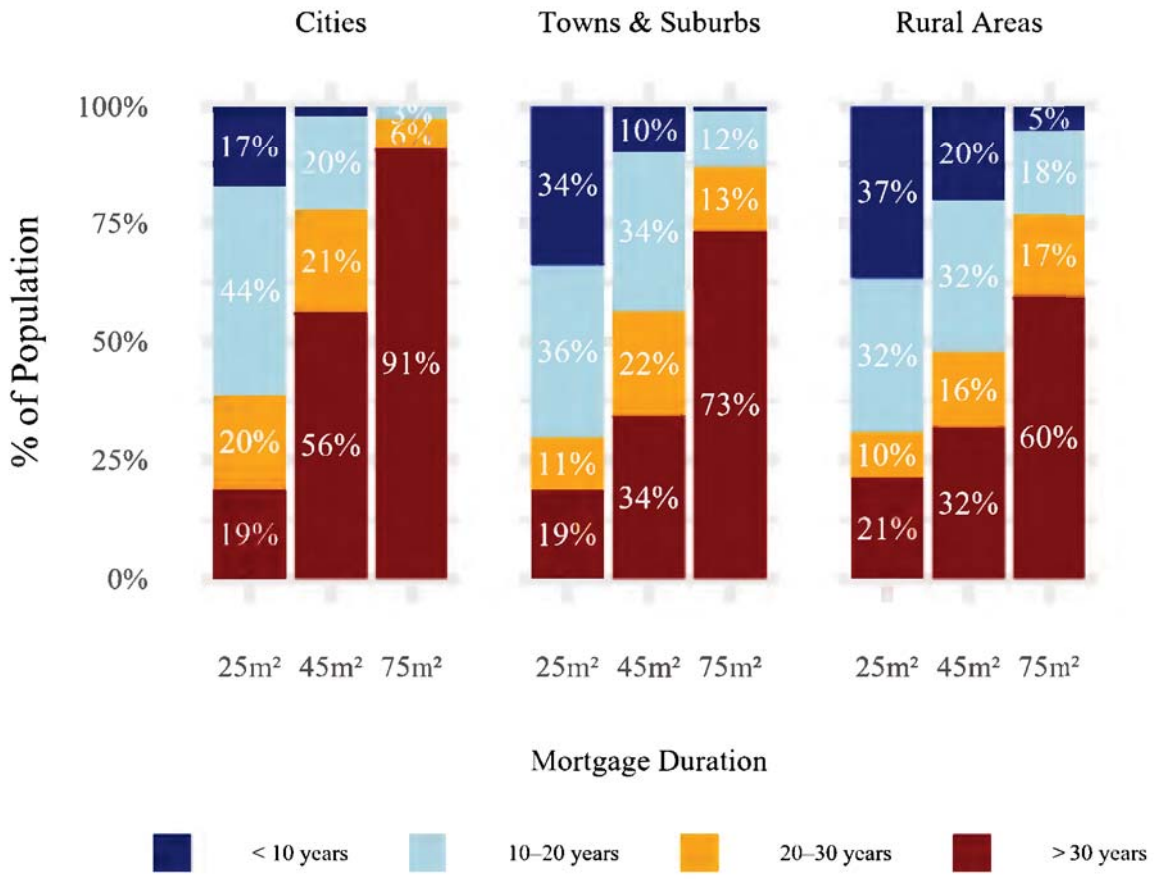


Source: European Commission: Joint Research Centre, 2025a, based on ESPON HOUSE4ALL data.

Major cities exhibit exceptionally high price premiums compared to national averages. Figure 6 summarises regional differences by regional category. It shows that in European cities, households often require mortgage durations of more than 30 years to afford even small units, while in rural areas a much larger share of the population can finance larger dwellings within shorter loan periods. This underlines the strong interaction between location, unit size, and financing conditions in shaping affordability outcomes. Findings are confirmed by Deloitte (2025) with exceptionally high city-level price premiums over national averages in Paris, Athens, Munich, Barcelona, Amsterdam, and Copenhagen. In line with evidence by Deloitte (2025), Figure 6 shows that several non-capital cities in the EU also face pronounced affordability pressures, with prices in cities like Munich, Frankfurt, and Hamburg in Germany, Barcelona in Spain, Milan in Italy, and Kraków in Poland sometimes exceeding those in their respective capitals. These figures highlight

the pronounced urban affordability gap within the EU. However, both Figure 6 and Deloitte (2025) illustrate that city affordability is a spectrum. Cities such as Oulu in Finland, Debrecen in Hungary, Lodz in Poland or Chemnitz in Germany ([35]) are more affordable than the price hotspots, but typically receive little attention in international, market-oriented city benchmark publications.

Figure 6: Purchase affordability by regional category

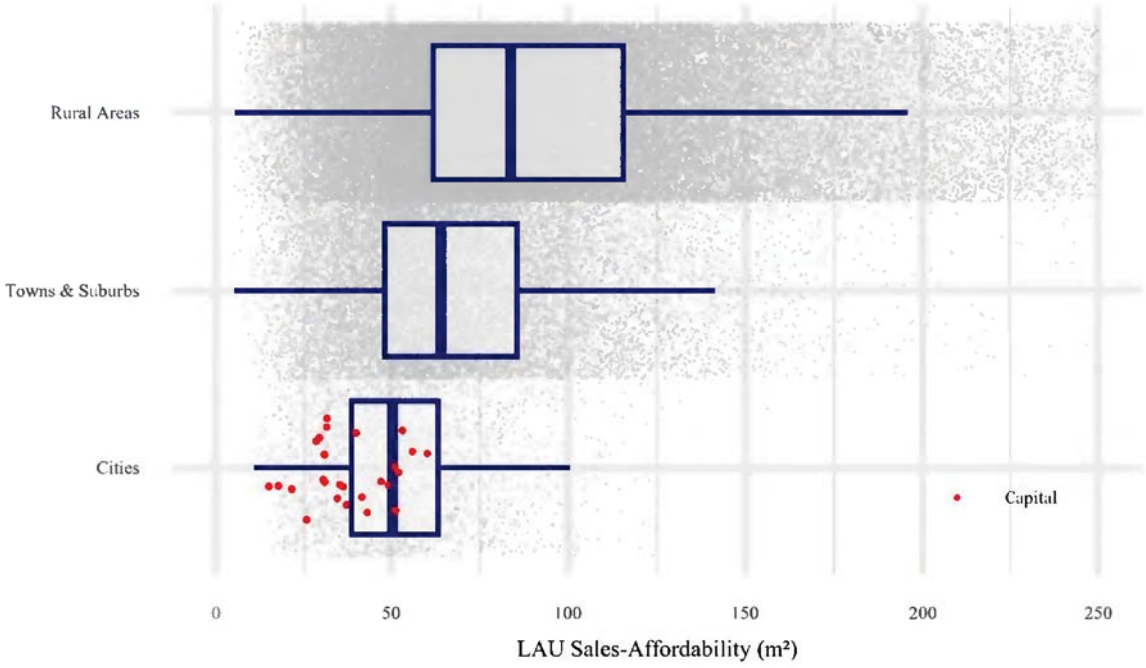


Source: Sielker and Banabak, 2025, based on ESPON HOUSE4ALL data.
Notes: Number of years needed to pay off the mortgage using 1/3 of disposable income by size of apartment.

([35]) Visible in Figure 5 but not listed in Deloitte (2025). However, for details on asymmetrical housing price development in Germany, see: Institut der deutschen Wirtschaft Köln e. V., Oberst, C., Voigtländer, M., Matysiak, G., *Analyse asymmetrischer Preisentwicklungen in Wohnimmobilienmarkt*, Institut der deutschen Wirtschaft, Köln, 2024, https://www.iwkoeln.de/fileadmin/user_upload/Studien/Gutachten/PDF/2024/Gutachten-Preisentwicklung-Wohnimmobilienmarkt.pdf.

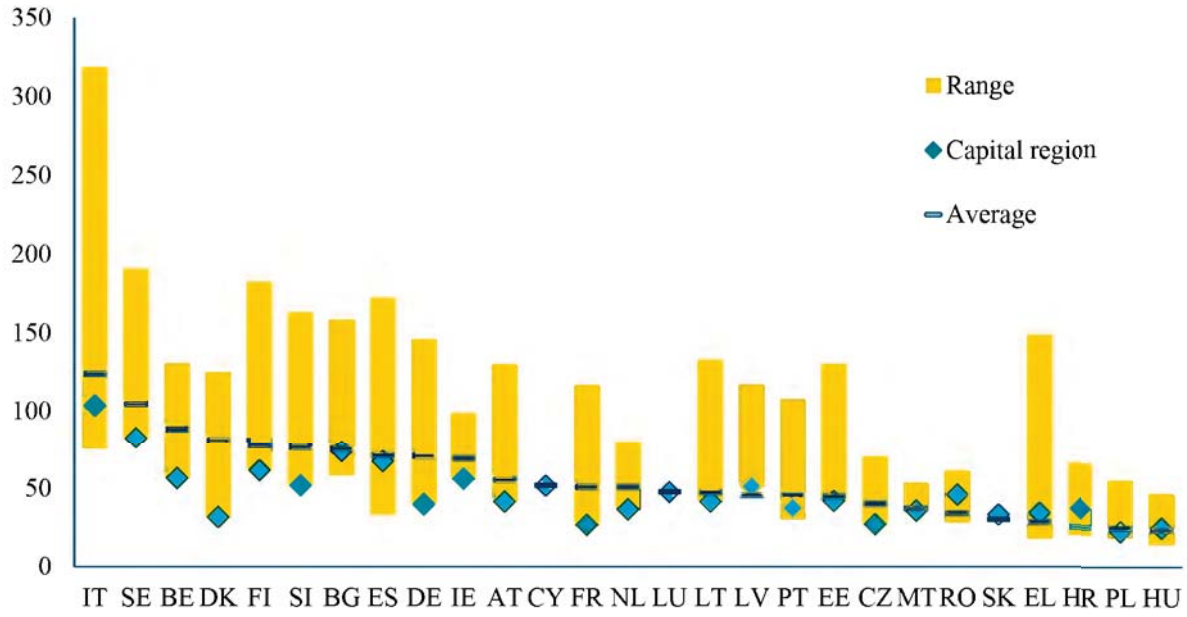
Purchase affordability is lowest in cities, in particular capital cities. Affordability for buying is particularly challenging in capital regions compared with their national averages. Figure 7 illustrates the heterogeneity of housing purchase affordability results at the local administrative unit (LAU) level from the previous map. The boxplots display the wide distribution across categories of degree of urbanisation (rural areas, towns and suburbs, and cities), with the boxes marking the interquartile range (the middle 50% of observations) and the vertical line within the box indicating the median. Averages of capital cities, highlighted in red, cluster below the 25th percentile and outside the interquartile range, underlining their particularly low affordability. Affordability for buying is particularly challenging in capital regions compared with their national averages (Figure 7). In 2025, some of the starkest cases are Denmark (on average in the country a person can buy 67.5 m² using 1/3 of the disposable income vs. 26.4 m² in Copenhagen), France (59.5 m² vs. 31.1 m² in Paris), Belgium (77.0 m² vs. 49.5 m² in Brussels), Germany (53.6 m² vs. 30.3 m² in Berlin), and Slovenia (57.3 m² vs. 39.0 m² in Ljubljana). In absolute terms, several capitals offer the least space for one-third of disposable income: Budapest 14.7 m², Warsaw 17.3 m², Prague 21.0 m², Copenhagen 26.4 m², and Valletta 26.6 m², with a total of 22 capitals where with one-third of income a person can buy less than 50 m².

Figure 7: Purchase affordability by of degree of urbanisation, 2025



Source: Sielker and Banabak, 2025.
Notes: Affordable m2 spending one third of average LAU income on a 30-year mortgage.

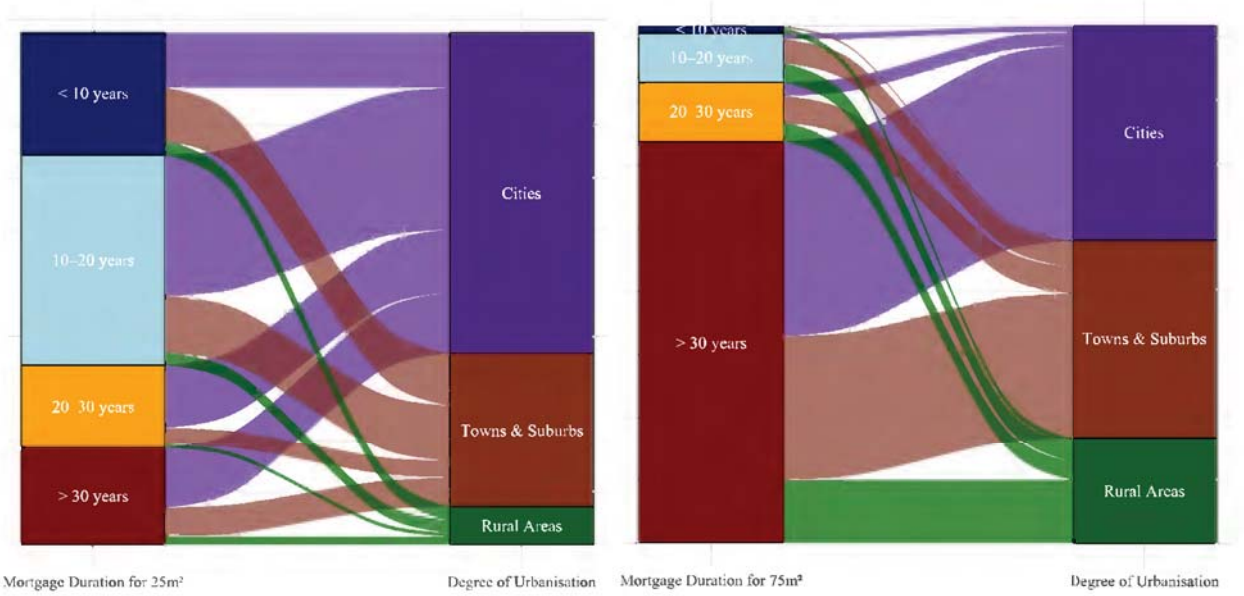
Figure 8: Purchase affordability by NUT3 region: m² that can be bought via mortgage using 1/3 of disposable income, 2025



Source: European Commission: DG Economic and Financial Affairs, 2025, based on ESPON HOUSE4ALL data.
Notes: For Greece, the Athens metropolitan area is split into several NUTS□3 units and EL303, Central Athens was selected. For Cyprus (CY000) and Luxembourg (LU000), the whole country is a single NUTS□3 region. For the Netherlands, it was selected the constitutional capital is Amsterdam (NL329), although the seat of government is The Hague.

In urban areas, even the smallest apartments are difficult to acquire, and slightly larger units are essentially unaffordable throughout the EU, including in rural areas. The map on regional purchase affordability (Figure 5) shows where price pressure is highest but gives the impression that large parts of the EU are still relatively affordable. However, affordability depends heavily on population density. Therefore, Figure 7, which combines population, price and income data at LAU level, displays the share of the population living in cities, towns and suburbs or rural areas and links those shares to the mortgage duration needed to buy different sizes of apartments. Across the EU, around 40% of the urban population would need a mortgage of more than 20 years to buy a 25m^2 apartment. For a 75m^2 apartment, the situation is even more severe: in rural areas the majority of buyers would need a mortgage of more than 30 years, while this share is above 90% of the EU population living in cities.

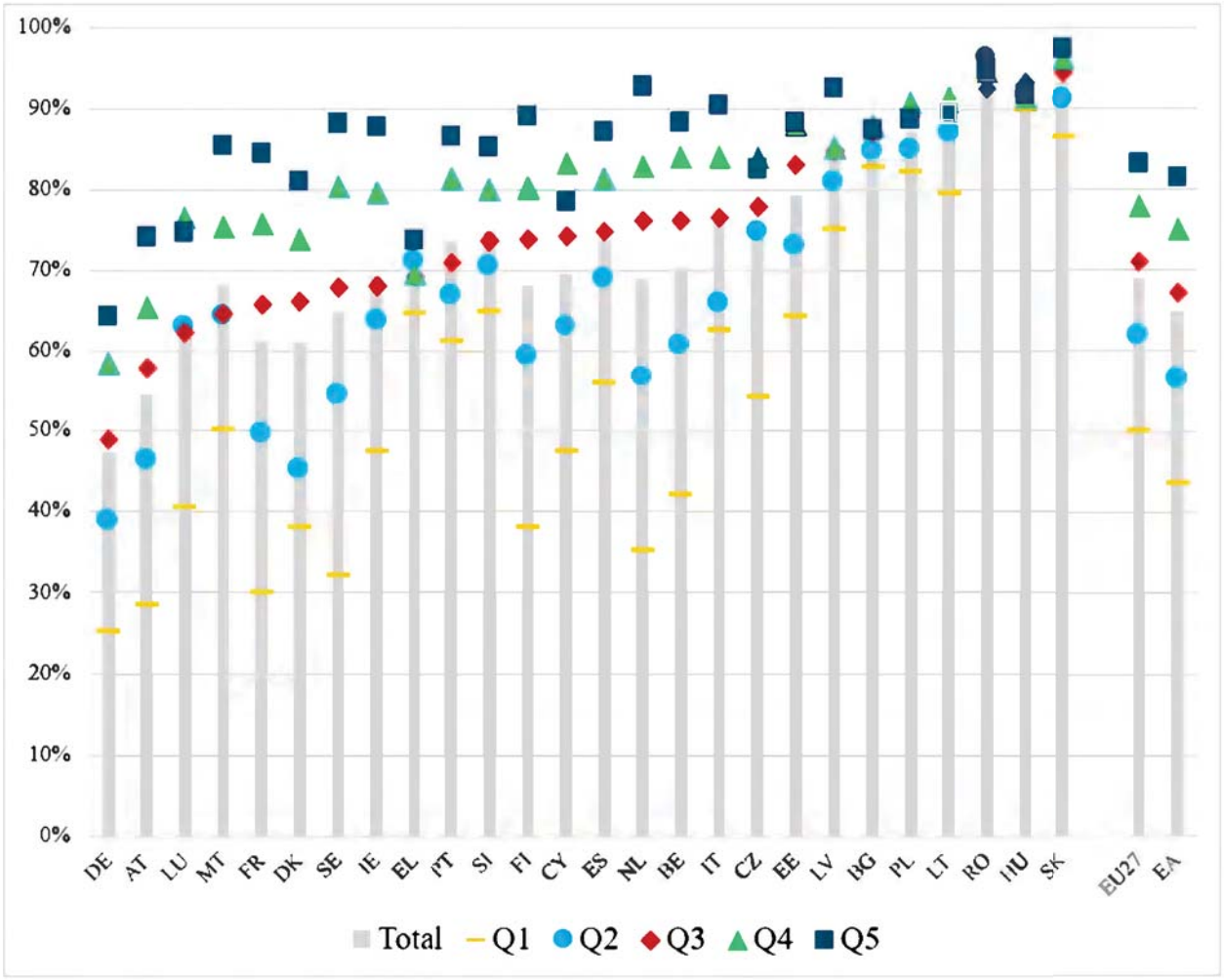
Figure 9: Purchase affordability by type of apartment and population share in different types of regions



Source: Sielker and Banabak, 2025, based on ESPON HOUSE4ALL data.
Notes: The left figure displays the situation for a dwelling of 25m2 and the right figure for 75m2. On the right hand of the charts the share of population living in a dwelling of 25 or 75m2 is displayed, differentiated by cities, towns & suburbs and rural areas. On the left hand of the charts the share of population is displayed differentiated by duration of mortgage needed to buy a dwelling of 25 or 75m2. Concretely, the charts display the share of population living in regions where spending 1/3 of median equalised income of that regions requires a mortgage of the duration shown to buy a dwelling of 25 or 75m2, respectively. The middle part of the charts relates the two concepts.

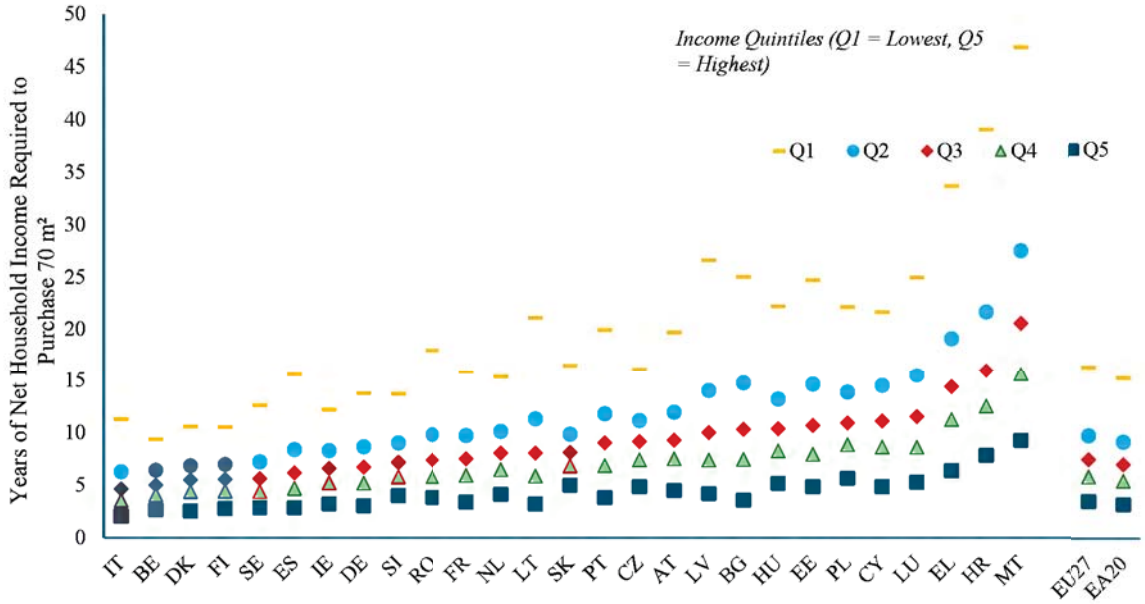
In all Member States, low-income groups find it most difficult to become homeowners, and especially in countries where ownership rates are low. Figure 10 shows the percentage of homeowner households in percentage of population in 2024, for the total population and households below 60% of median equalised income (which is an income situation in relation to the risk of poverty threshold; for total ownership rates see also Box 1.1). Ownership is particularly low among low-income households in countries with generally low ownership rates, such as Germany, Austria, France, Sweden, and the Netherlands. By contrast, in countries with ownership rates above 75 percent (all in Central and Eastern Europe), low-income households are typically also homeowners. The largest gaps between the overall ownership rate and that of low-income households are found in the Netherlands (36.7 pp), Sweden (34.7 pp), and Finland (33.6 pp). Substantial gaps are also observed in France (32.0 pp), Belgium (29.8 pp), and Czechia (28.9 pp). More equal patterns, with smaller gaps, are found in medium- to high-ownership markets such as Greece (5.2 pp) and Malta (14.0 pp). Overall, the gap amounts to 18.8 percentage points in the EU-27 and 20.7 percentage points in the EA-20. This picture is broadly confirmed also by the years of income needed to buy 70m^2 by income quintile, where low-income households partially need more than lifetime earnings for such an acquisition (Figure 11).

Figure 10: Percentage of homeowners by income quintile, 2024 (% of population)



Source: Eurostat *ad hoc* extraction (based on ilc_lvho02), data extracted on 15/10/25.

Figure 11: Years of income needed to buy 70m² by income quintile, 2024



Source: European Commission: DG Economic and Financial Affairs, 2025, based on ESPON HOUSE4ALL and Eurostat data.

3.3. Rental affordability

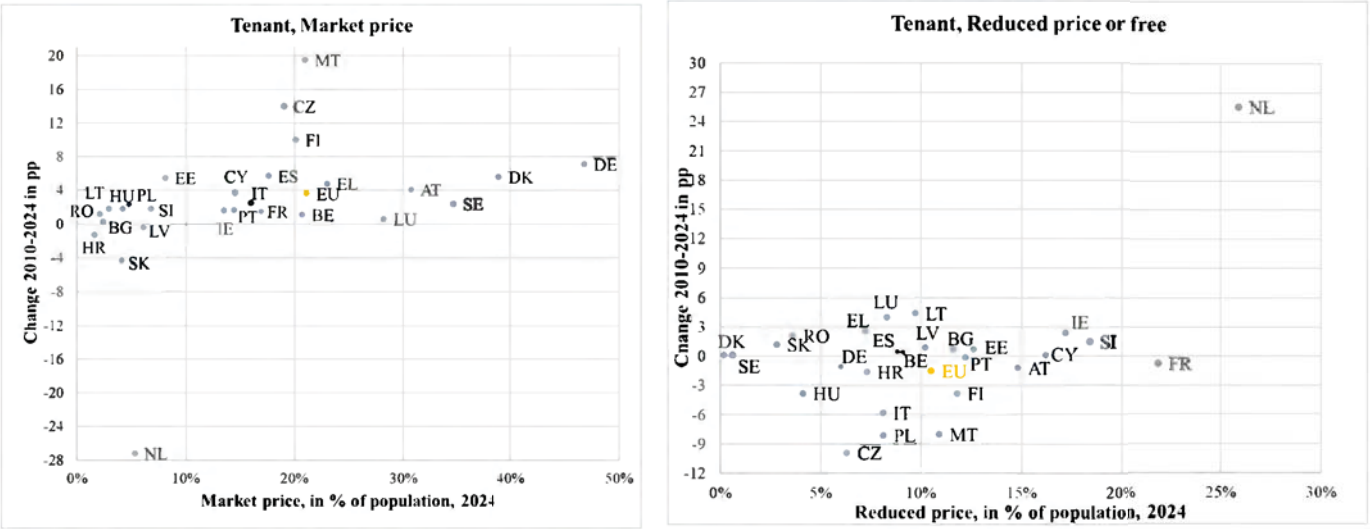
Aggregated rent dynamics have been comparatively moderate in relation to house price. Over the last ten years, nominal rents in the EU27 increased on average by 1.9% per year (adding up to 25% overall), compared with 4,9% per year (or cumulative 61%) for house prices. Nonetheless, rent growth has shown marked acceleration over the past two years, growing by around 3% per year.

On average, real rents have fallen over the last 15 years. While over the past 15 years, nominal rents in EU27 have increased strongly, inflation-adjusted rents (so-called real rents) have declined by 10% (0.8% per year). Differences between countries are substantial both in rent dynamics and in differences between nominal and real rent development. While real rents in Estonia increased by 4.1% per year, adding up to 75% since 2010, the nominal increase was 8.4% per year (208% since 2010). In Ireland, which recorded the third-strongest real rent increase of 3.8% per year (68% since 2010), the gap to nominal rents was smaller, at 5.4% per year (108% since 2010). In 15 countries, a positive nominal rent development turned negative in real terms, which is also the case for the EU-27 and the euro area (EU-20) aggregates. Figure 12 shows the difference between average annual nominal and real rent changes since 2010 for the EU27.

Rent dynamics is closely linked to house prices, composition of rent types and degree of rental market development. There is a significant correlation between house prices and average

rents. However, growth in house prices has been more pronounced, gradually reducing the price-to-rent ratio. First, this development might be due to the difference between old and new rental contracts (see next paragraphs). Second, rent data may fail to provide a clear picture of market stress in countries with a disproportionately large share of reduced or free tenancy. Notable examples are Slovenia and Estonia, which combine relatively high ownership rates (75% and 79% respectively) with a relatively high shares of reduced rents. The Netherlands is a particular case, with an average homeownership rate (69%) but a falling share of market rents in light of rental market regulations ([36]) and the highest share of reduced or free rents (26%). In all these countries the tenancy share at market prices is below 10% ([37]).

Figure 12: Divergent levels and development of tenant shares by country



Source: Eurostat, (ilc_lvho02), accessed 15/09/25.

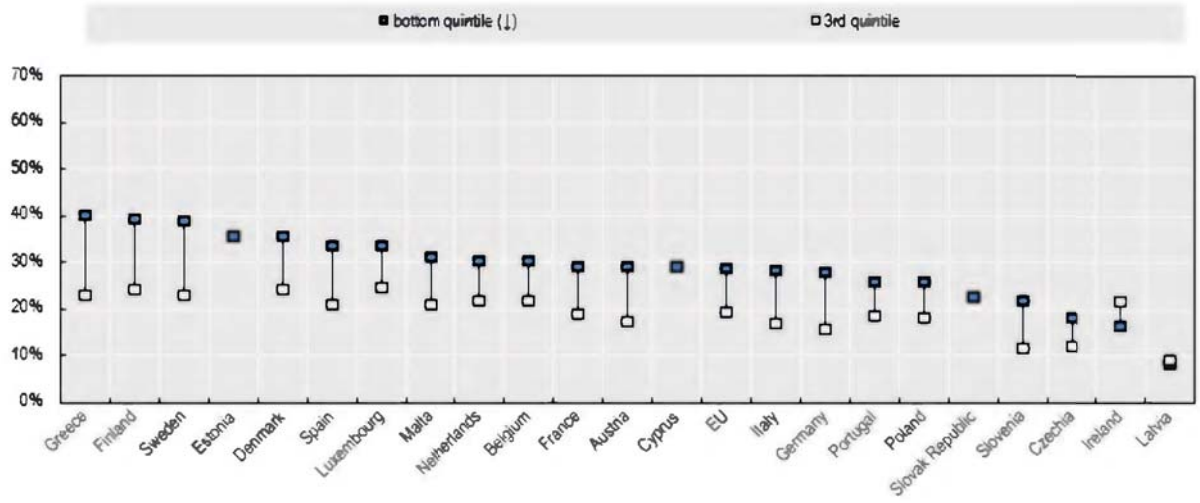
Rent payments represent a significant burden for low-income households. For the households with the lowest income (bottom quintile in Figure 13) rent payments absorb around 30% of their

([36]) Rabobank, 'Kwartaalbericht Woningmarkt', Rabobank website, 4 September 2025, accessed 30 September 2025, https://www.rabobank.nl/kennis/d011497025-kwartaalbericht-woningmarkt-veel-woningverkopen-en-aanhoudende-stijging-huizenprijzen.

([37]) The proportion of tenants paying market rent rose in most countries between 2010 and 2024 (Figure 12). The largest increases were recorded in Malta (+19.5 pp), the Czech Republic (+14.0 pp), and Finland (+10.0 pp). In contrast, the Netherlands (-27.2 pp), Slovakia (-4.3 pp), Croatia (-1.3 pp), and Latvia (-0.4 pp) saw declines. Tenant shares at market rent also rose in countries with already high rental levels, such as Germany, Denmark, Sweden, and Austria. In contrast, tenant with reduced or free rents expanded strongly in the Netherlands (+25.6 pp) and remained high in France, Slovenia, Ireland, Cyprus, and Austria (14.8–21.9% in 2024). Notably, declines were observed in the Czech Republic, Malta, Poland, and Italy (-6 to -10 pp). (see Figure 12). Finally, in countries with small rental sectors, like in various countries in Central and Eastern Europe (see Box 1.1), strong rent increases might be linked to the mismatch between high demand for rental units and a limited supply given the shallow rental market.

disposable income, with marked differences across Member States. In turn, for countries where data are available, middle-income households spend around 20% of their disposable income on rents. Notably, rent payments here include also social rents and long-standing rent contracts where the rents are arguably low. In turn, these are existing rent contracts, while the burden is likely even higher for those who need to conclude a new rental contract (see below).

Figure 13: Median of rent burden (private market and subsidised rent) as a share of disposable income in the bottom and the third quintiles of the income distribution, 2022 or latest year available



Source: *OECD, 2024.*

The level of strain in the housing market becomes evident when looking at new rents which are growing more than average rents or inflation and broadly in line with income. The distinction between existing and new rents is crucial for understanding rental affordability, as new tenants face significantly higher rental costs. Although there are no data for new rental contracts across the EU, they do exist for prime locations. Figure 14 shows the development of new rents for a two-bedroom apartment in prime locations of EU capital cities, weighted by population share of each Member State. New rents (rather than average rents) are also more suitable for a comparison with house prices, as new rents are the relevant alternatives for those considering renting or purchase a home. Between 2013 and 2024, new rents in capital cities rose sharply, broadly tracking median income growth and clearly outpacing inflation, with cumulative increases of about +36% by 2023 versus +44% for incomes and +30% for inflation.

Figure 14: Median income, inflation, average rents (HICP rent index) and new rents, EU27, 2013-2024

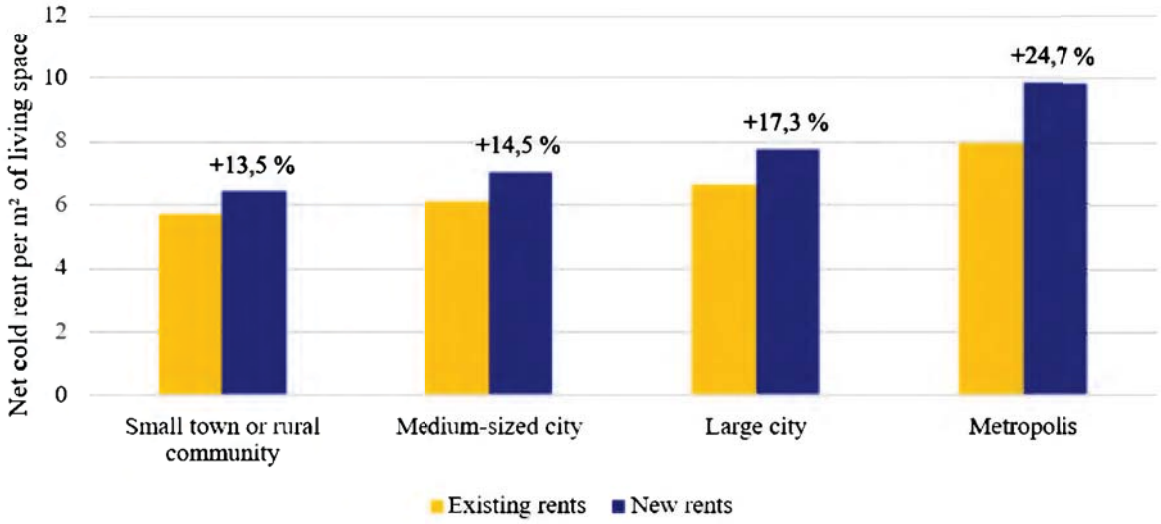
Source: European Commission: DG Economic and Financial Affairs, 2025, based on ESPON HOUSE4ALL and Eurostat data.
Notes: The category "New rents" refers to the rent of a 2-bedroom apartment in EU27 capitals (Eurostat, prc_colc_rents, accessed 30/09/25).

The gap between existing and new rents is largest in urban areas. For Germany, the German Council of Economic Experts analysed the differences between existing and new rents across settlement types ([38]). While rent levels for long-standing tenants remain comparatively low, new tenants face substantially higher costs, particularly in urban areas. The gap between existing and new rents increases with city size, ranging from about 13–15% in small towns and medium-sized cities to more than 24% in metropolitan areas (Figure 15). These numbers refer to 2018, i.e. before new rent growth accelerated, substantially widening this gap. Falck et al. (2025) estimate, based on the 2022 German Census, new rents even exceed existing rents by 48% in the seven largest German cities and by 31% nationwide. These values are well above the figures reported by the German Council of Economic Experts (2024) and indicate a pronounced gap between sitting and

([38]) Sachverständigenrat, 'Wohnen in Deutschland: Knappheiten beheben und Zugang erleichtern - Kapitel 4:', in: Sachverständigenrat, *Jahresgutachten 2024/2025*, 2025, p.247, https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg202425/JG202425_Kapitel_4.pdf.

asking rents, particularly in the biggest cities. This gap reflects an emerging insider–outsider structure in the regulated rental housing market. As rent differentials increase, tenant mobility declines. The resulting lock-in effect reduces the number of moves and lowers the efficiency of housing stock allocation, contributing to tighter market conditions. Falck et al. (2025) show that, compared to 2010, average residence duration in the Top-7 cities has risen, while internal mobility has decreased. This reduced residential mobility also limits labour market adjustment and may dampen productivity.

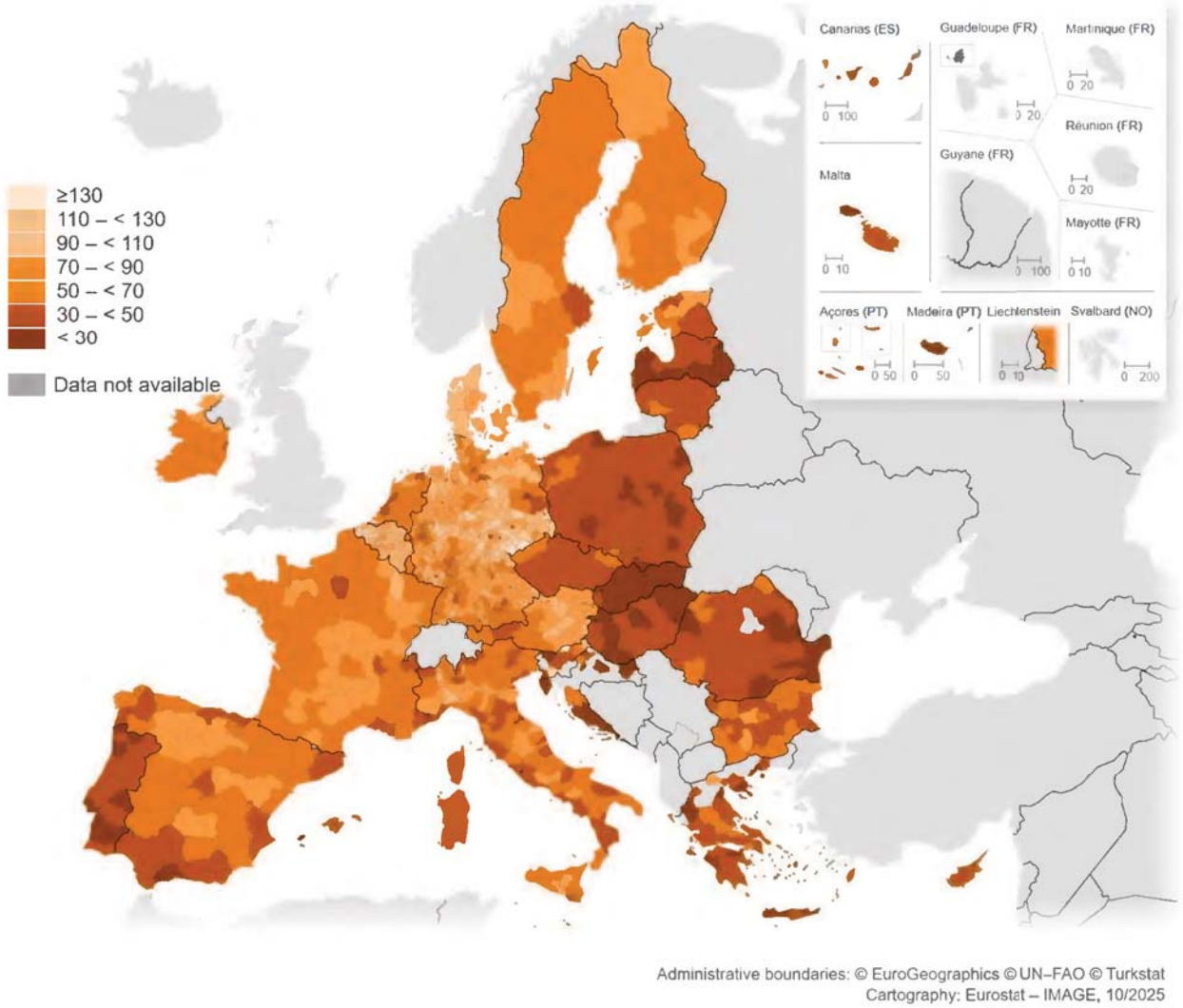
Figure 15: High gap between existing and new rents: empirical evidence from Germany



Source: German Council of Economic Experts (*Sachverständigenrat*), based on RDC of the Federal Statistical Office and Statistical Offices of the Länder, 2024.
Notes: Size by population: small town or rural municipality up to less than 20,000 people; medium-sized city 20,000 to less than 100,000 people; large city 100,000 to less than 500,000 people; metropolis 500,000 and more people. New tenants are tenants who moved into their current home less than two years ago. Based on the supplementary housing survey of the 2018 microcensus.

While there are no official national data on new rents, web-scraped regional data show a low rental affordability in metropolitan areas. Based on web-scraped real estate advertisements (2024–2025) and local income data from Mikou et al. (2024), Eurostat (code: prc_colc_rents) and HOUSE4ALL approximates regional rental affordability (subject to the same limitation as their estimates of purchase affordability reported above). Figure 16 presents rental affordability as the number of square metres that can be rented spending one third of monthly income. The map shows clear spatial disparities, with rental affordability generally higher in rural and peripheral regions, as well as in much of Northern and Eastern Europe. By contrast, rental affordability is particularly low in capital cities such as Paris, Madrid, Warsaw, Athens, and Lisbon, as well as in touristic coastal regions. Compared to purchase affordability, rental affordability is higher in many parts of Scandinavia but lower across Southern Europe.

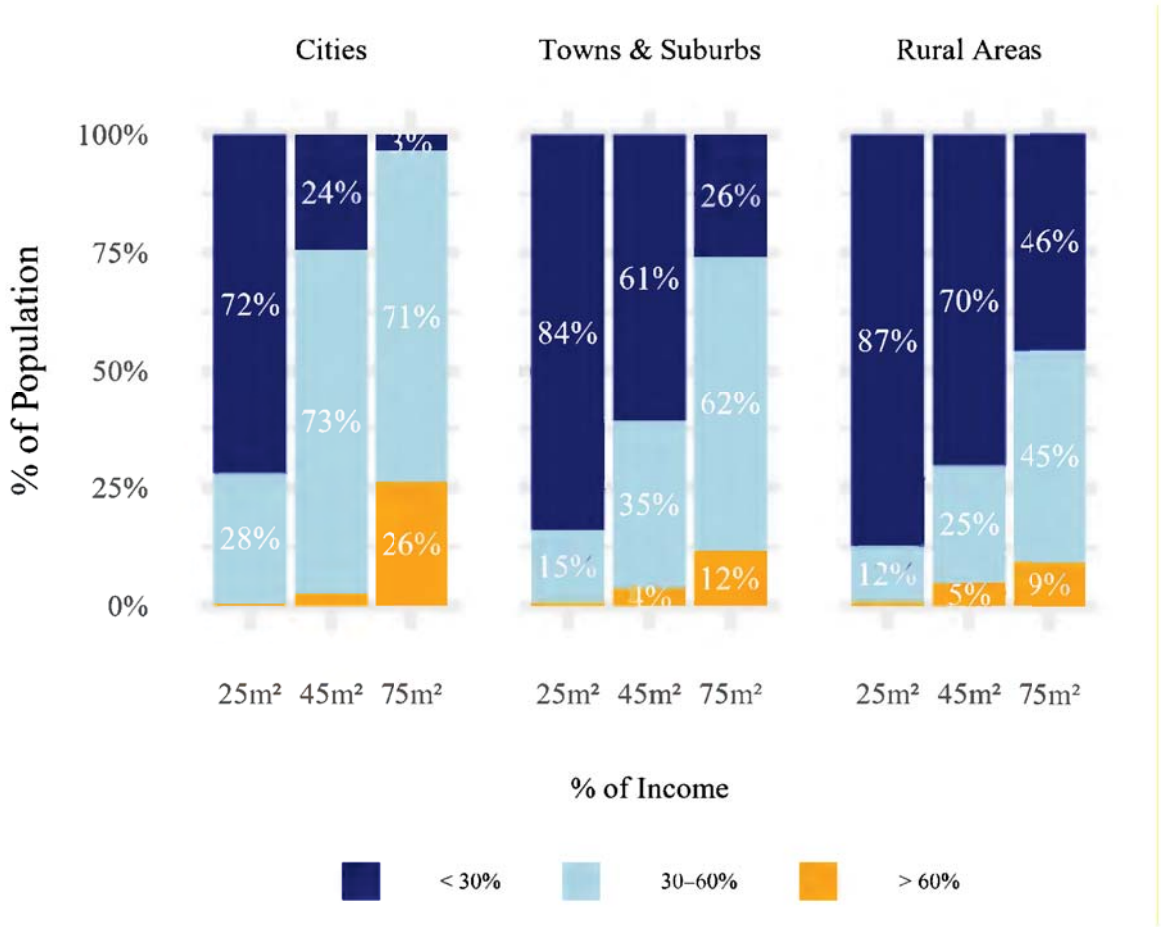
Figure 16: Rental Affordability for new contracts (m2 that can be rented using 1/3 of disposable income)



Source: European Commission: Joint Research Center, 2025b, based on ESPON HOUSE4ALL data.

Renting medium-sized apartments in cities is largely unaffordable, whereas in rural areas it is considerably more affordable. Figure 17 displays the share of average income needed for renting different sizes of apartments in different types of degree of urbanisation (cities, towns/suburbs, and rural areas) across the EU. 30% of the urban population lives in cities where households need to spend more than 60% of the average income when newly renting a 75m^2 apartment, the remaining 70% of households need to spend between 30 and 60% of the average income. For the smallest apartments, 30% of the urban population would need to spend more than 30% of the average income for a new rent contract. The situation in towns and suburbs is only slightly better. In turn, in rural areas where a rental market exists, it is less tight, and almost half of the population live in a place where households can afford to rent even relatively big apartments.

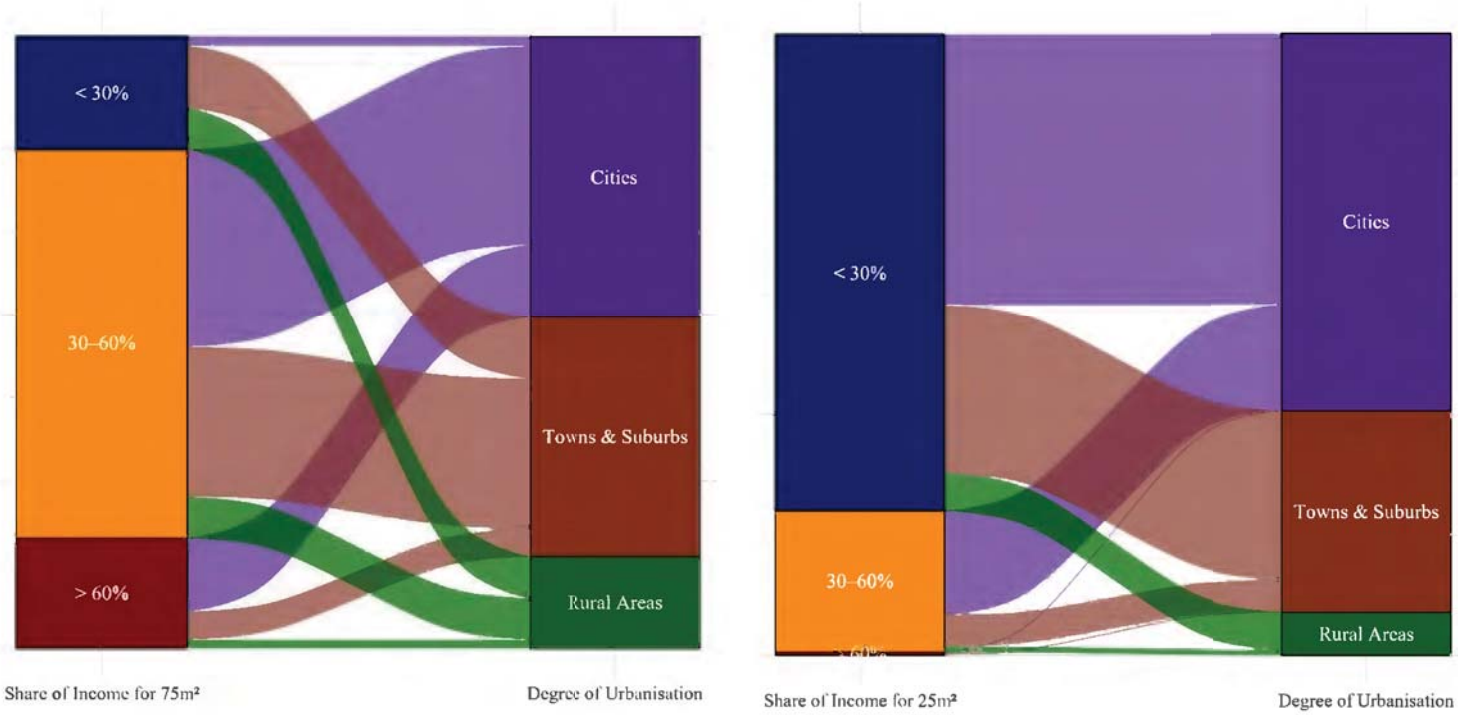
Figure 17: Rental affordability by regional category



Source: Sielker and Banabak, 2025.

For a large share of population in EU cities, an average income only allows renting a tiny apartment and for most citizens renting larger units is close to unaffordable across the EU, even in comparatively cheaper rural regions. Similar to purchase affordability, while the map (Figure 16) shows in which regions pressure is highest, the map seems to suggest that throughout the EU large areas are rather affordable. To assess the share of population concerned, however, population density is key also for rental affordability. Figure 18 (using population, rental costs and income data at LAU level) displays the share of the population living in cities, towns / suburbs and rural areas and links these shares to the proportion of average income required to rent different apartments sizes. Across the whole EU, only apartments of 25m^2 can be rented for less than 30 % of average income. For a 75m^2 apartment, tenants in most cities must allocate more than 30% and often more than 60% of average income to cover the rent. The situation improves modestly in towns and suburbs, where the income shares needed falls slightly, but in rural areas rental affordability improves significantly.

Figure 18: Share of population and share of average income needed to rent 25m2 and 75m2 apartments by type of region



Source: Sielker and Banabak, 2025, based on ESPON HOUSE4ALL data.
Notes: The left figure displays the situation for a dwelling of 75m^2 and the right figure for 25m^2. On the right hand of the charts the share of population living in a dwelling of 25 or 75m^2 is displayed, differentiated by cities, towns & suburbs and rural areas. On the left hand of the charts the share of population is displayed differentiated by the share of income needed to rent a dwelling of 25 or 75m^2. Concretely, the charts display the share of population living in regions where the respective share (e.g. below 30%) of median equalised income of that regions is needed for renting a dwelling of 25 or 75m^2, respectively. The middle part of the charts relates the two concepts.

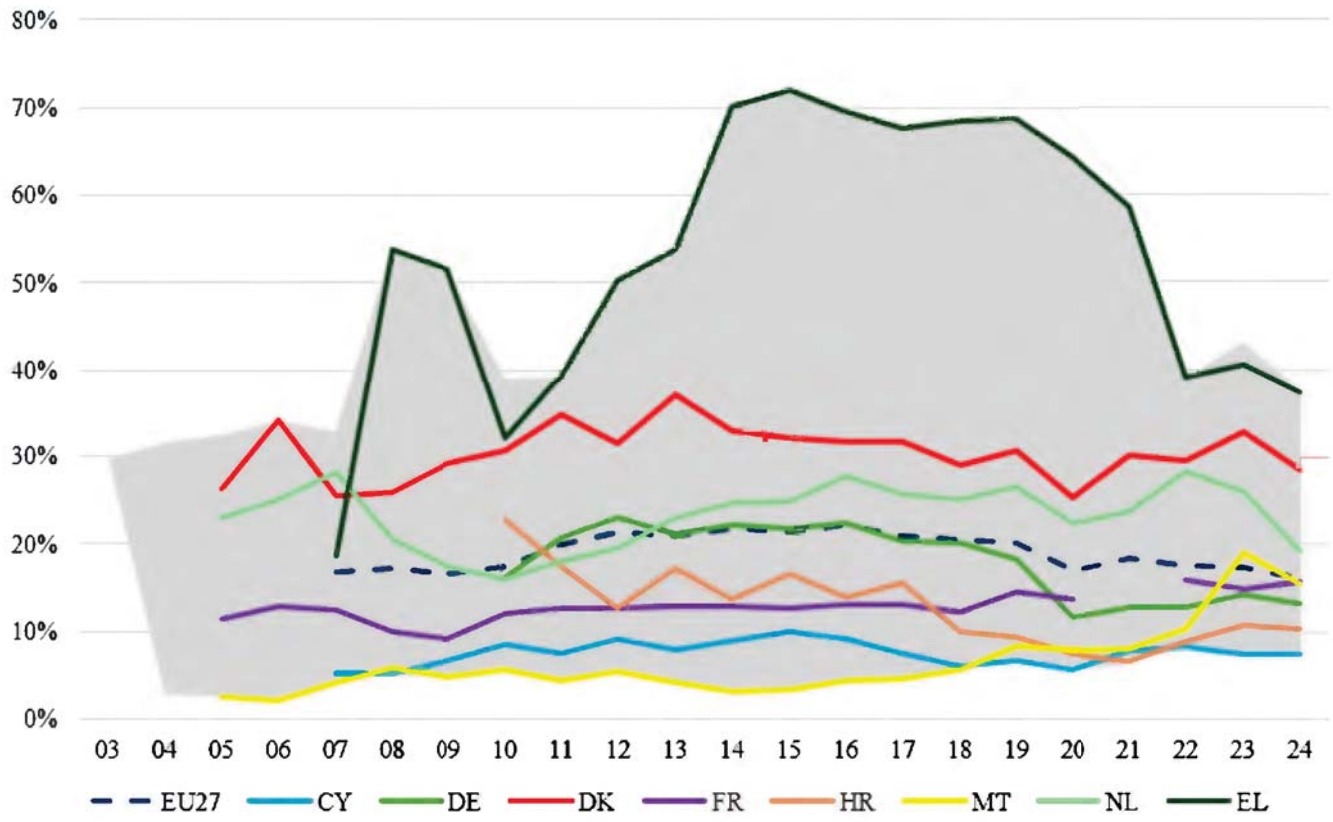
While the housing cost to income ratio is widely used to trace housing affordability, the housing cost overburden rate and the overcrowding rate are common indicators to capture the share of the population affected. In light of the shortcomings of housing cost (for rent or purchase) to income ratios discussed above, or similar measures used in the regional analysis above, other indicators are often used to capture the share of the population affected instead of the situation of the average household.

3.4. Housing cost overburden rate

The housing cost overburden rate is used to identify the rate of the population living in households where housing costs represent more than 40% of disposable income, and it estimates the extent to which housing costs impact the disposable income of the overall population, especially for tenants and people on low income. The housing cost overburden rate is the percentage of the population living in households where the total housing costs, including ancillary costs ('net' of housing allowances), represent more than 40% of disposable income (also 'net' of housing allowances). It is used in several European Commission monitoring frameworks including the Social Scoreboard of the European Pillar of Social Rights. Housing costs include rents for tenants, mortgage interest payments for homeowners, utilities (water, electricity, gas, and heating), and expenses on structural insurance, mandatory services and charges (e.g., sewage and refuse removal), regular maintenance and repairs, and taxes. For tenants (see **Error! Reference source not found.**) this is a useful measure to assess if they can make ends meet, since it is not only linked to expenditures related to the housing market, i.e. the rent to income, but also other costs like energy. For homeowners, it can be noted that only the interest payments for mortgages are included, leaving out the principal repayment that households must meet under a mortgage contract and which accounts for the larger share of the montly payment in later years of repayments. Consequently, when comparing the housing cost overburden rate across tenure status or across countries, the different homeowner shares across countries need to be taken into consideration. The standard practice of using 40% of disposable income to assess housing cost impact does not account for income distribution, leaving many people close to the threshold, thus not allowing a clear picture of how housing costs affect different income levels. The housing cost overburden indicator alone does not capture all the effects of housing costs on the population. In order to capture housing affordability more broadly and to assess the tightness of the housing market, other data should also be considered.

The EU average of 16.2% housing cost overburden rate of tenants can hide very different situations in Member States. In Germany (Figure 19), the overburden rate of tenants has been low and falling in recent years. In the Netherlands, a persistent shortage of affordable housing and policies that disincentivised investment in private rentals led to a decline of the rental market by around 25% (see box 1.1) and an increase of the overburden rate for tenants between 2020 and 2023, now declining. Greece recorded one of the highest housing cost overburden rates for tenants in the EU between 2013 and 2022, based on a deep decline of household incomes after the financial crisis, a high incidence of low-income households, high energy and utility costs, limited social housing and a low level of housing allowances, and the rise of STRs after 2015.

Figure 19: Housing cost overburden rate for tenants – EU average and selected countries



Source: Eurostat *ad hoc* extraction (based on ilc_lvho07c), data extracted on 05/12/25.
Notes: The category "Tenants" covers "Tenant, rent at market price" and "Tenant, rent at reduced price or free". The grey band represents the complete distribution of indicator values (e.g., severe housing deprivation) across the 27 EU Member States for each year. It highlights the minimum and maximum values recorded among Member States, with all other national observations situated within this range. Selected Member States are highlighted within this range, alongside the EU27 average.

In 2024, the share of the population facing housing cost overburden in the EU was 8.2%. Housing cost overburden is significantly higher for people at-risk-of poverty (AROP) at 31.1% against 3.8% for the rest of the population, indicating an increased vulnerability of people with low-incomes ([39]). The housing cost overburden rate has been decreasing in the past years, however this could partially be explained by people not being able to afford desired (and needed) housing upgrades.

([39]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Housing cost overburden rate by age, sex and poverty status' [ilc_lvho07a], 2024, accessed 04/12/25.

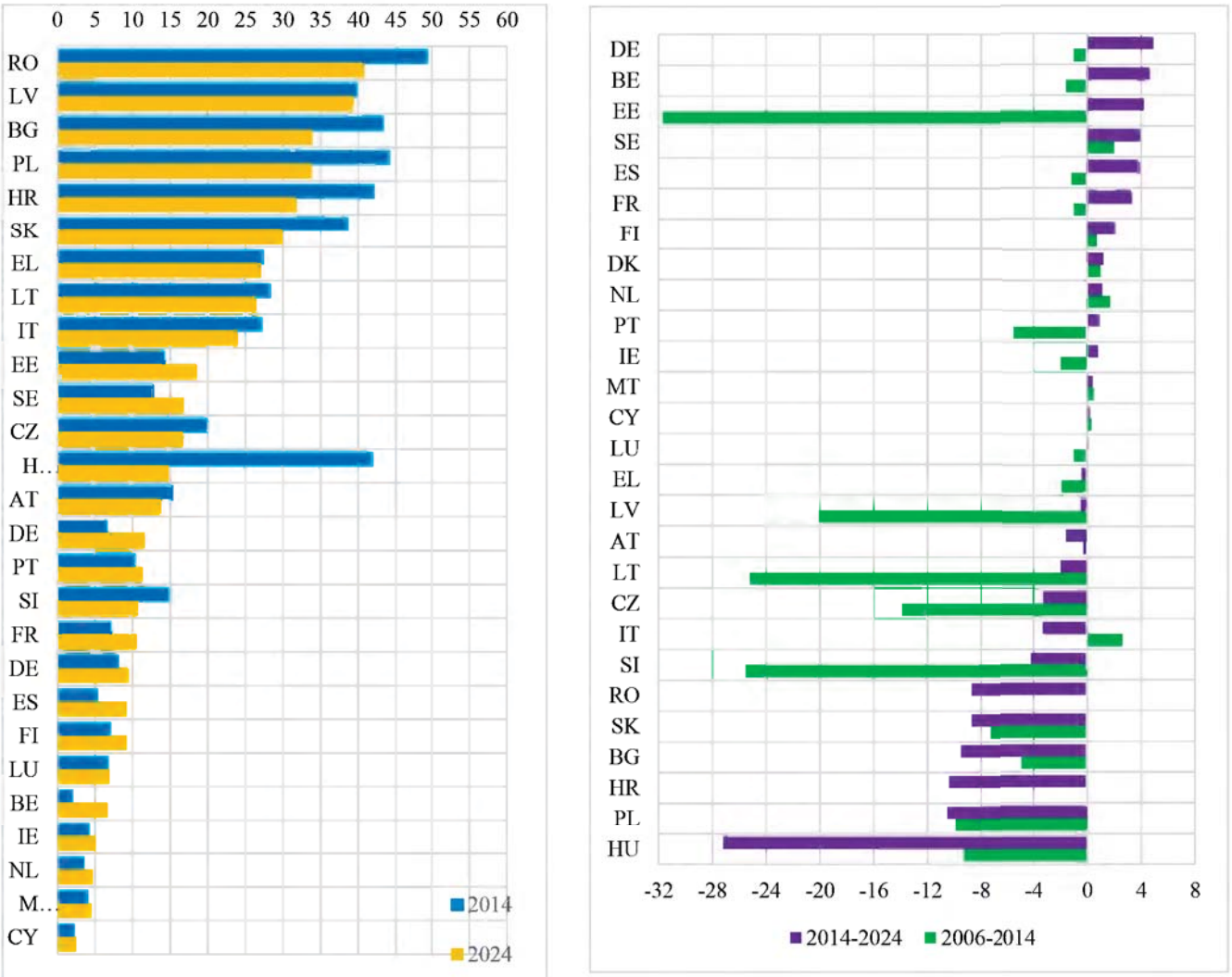
3.5. Overcrowding rate

The overcrowding rate, a proxy for inadequate housing, has slightly declined in the EU-27 over the past two decades, with strong improvements recorded in Central and Eastern Europe contrasting with a worsening in Western European countries. However, there are large differences across Member States, with rates above 40% in some (e.g. Romania and Latvia) and below 5% in others (e.g. Cyprus and the Netherlands). While the overall EU average has fallen, pressures remain high in many regions, particularly for lower-income households.

The overcrowding rate, defined as the share of the population living in households with too few rooms for their size and composition, is often used as an alternative measure of housing affordability with a focus on housing adequacy. The overcrowding rate in the EU-27 fell slightly from around 19.1% in 2010 to 16.9% in 2024. In contrast, the euro area saw a modest worsening from 12.2% in 2014 to 13.7% in 2024. In turn, several Central and Eastern European Member States experienced substantial improvements over this period (

Figure 20). However, a turnaround is visible in some countries that had previously (between 2006 and 2014) reduced overcrowding (e.g. Estonia, Portugal and Ireland), which are again reporting rising rates.

Figure 20: Overcrowding rate by country, EU-27, 2014 and 2024, in % of total population (left) and change in percentage points (right)

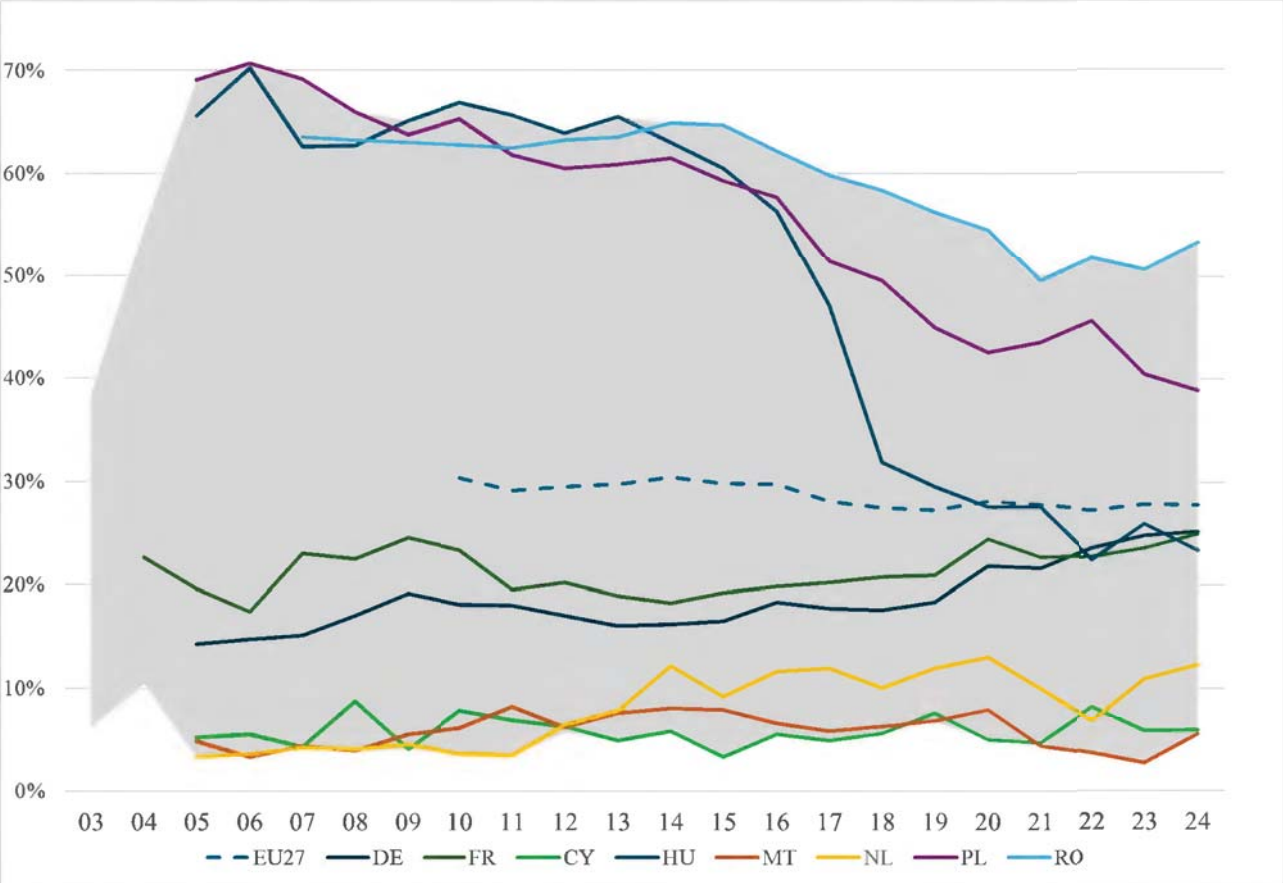


Source: Eurostat, (ilc_lvho05q), accessed 22/09/25.

Low-income households are most affected by overcrowding. When differentiated by income groups, data shows that overcrowding in the EU is about 28% for the lowest income quintile, compared with 8% for the highest one. Over the past eight years the overcrowding rate for the low□income group has remained roughly unchanged at this high level (**Error! Reference**

source not found.). Across the EU, overcrowding is an issue that concerns mainly urban areas, with peaks above 40% in Latvian, Romanian and Bulgarian households [40].

Figure 21: Overcrowding rate for first income quintile, EU27 and selected countries



Source: Eurostat, (ilc_lvho05q), accessed 21/09/25.
Notes: The grey band represents the complete distribution of indicator values (e.g., severe housing deprivation) across the 27 EU Member States for each year. It highlights the minimum and maximum values recorded among Member States, with all other national observations situated within this range. Selected Member States are highlighted within this range, alongside the EU27 average.

[40] European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Overcrowding rate by degree of urbanisation – total population', [ilc_lvho05d], accessed 02/12/25.

4. SOCIAL, ECONOMIC AND ECOLOGICAL CONSEQUENCES OF HOUSING MARKET DEVELOPMENTS

The lack of affordable, sustainable and quality housing in Europe has far-reaching social, economic and environmental implications, for democracy and society at large. Socially, rising housing costs increase the risk of poverty, homelessness, and inequality, disproportionately affecting low-income households, persons in vulnerable situations like older people, single parents and families with children at risk of poverty, LGBTIQ+ people, persons with disabilities, victims of gender-based violence, Roma and other ethnic minorities, migrants, and other groups at risk of exclusion or discrimination, but also middle-income households in particularly expensive housing markets. These trends exacerbate intergenerational divides in wealth and access to quality and affordable housing, delay family formation, and threaten long-term demographic stability. Economically, housing unaffordability and unavailability constrains and hinders labour- and educational mobility for studies and research, hinders productivity, and limits growth by discouraging relocating to dynamic regions. In addition, high housing costs reduce disposable income and therefore consumption, especially among low-income households. The construction sector is a key economic contributor, yet it faces declining productivity, uneven investment patterns, and a slow adoption of innovation. Environmentally, expanding and renovating the housing stock to address housing shortages on the one hand carries environmental costs, as the construction sector is responsible for substantial greenhouse gas emissions, material use, and waste generation. Urban sprawl and rising land consumption further strain ecosystems and biodiversity, highlighting the need to balance housing expansion with sustainability objectives e.g. by densification, brownfield redevelopment and a better use of the existing vacant or derelict building stock. On the other hand, energy renovations of the housing stock can lower energy consumption and costs.

4.1. Social consequences

4.1.1. Risk of poverty, homelessness and increased vulnerabilities

Increasing housing scarcity and lack of affordability can negatively impact living conditions. Over the 2010–2025 period, house prices increased by 61.09% ([41]) and rents by 28.99% across the EU ([42]), with large disparities across countries and regions. For example, Estonia recorded a rent increase of about 222.93%, Lithuania 191.134%, Hungary 126.17%, and Ireland 116.95% over this period. In comparison, average incomes in the EU grew by 60.3% ([43]) during the same period (see section 3). Since 2015, the divergence has become particularly pronounced: nominal house

([41]) European Commission: Directorate-General for Economic and Financial Affairs, own calculations.
([42]) Rent data in this paragraph compares the annual average for 2020 with the average for 2025 (based on data available from January to October 2025): see: European Commission: Eurostat, 'HICP - monthly data (index)', [prc_hicp_midx], accessed 09/12/25.
([43]) European Commission: Directorate-General for Economic and Financial Affairs, own calculations.

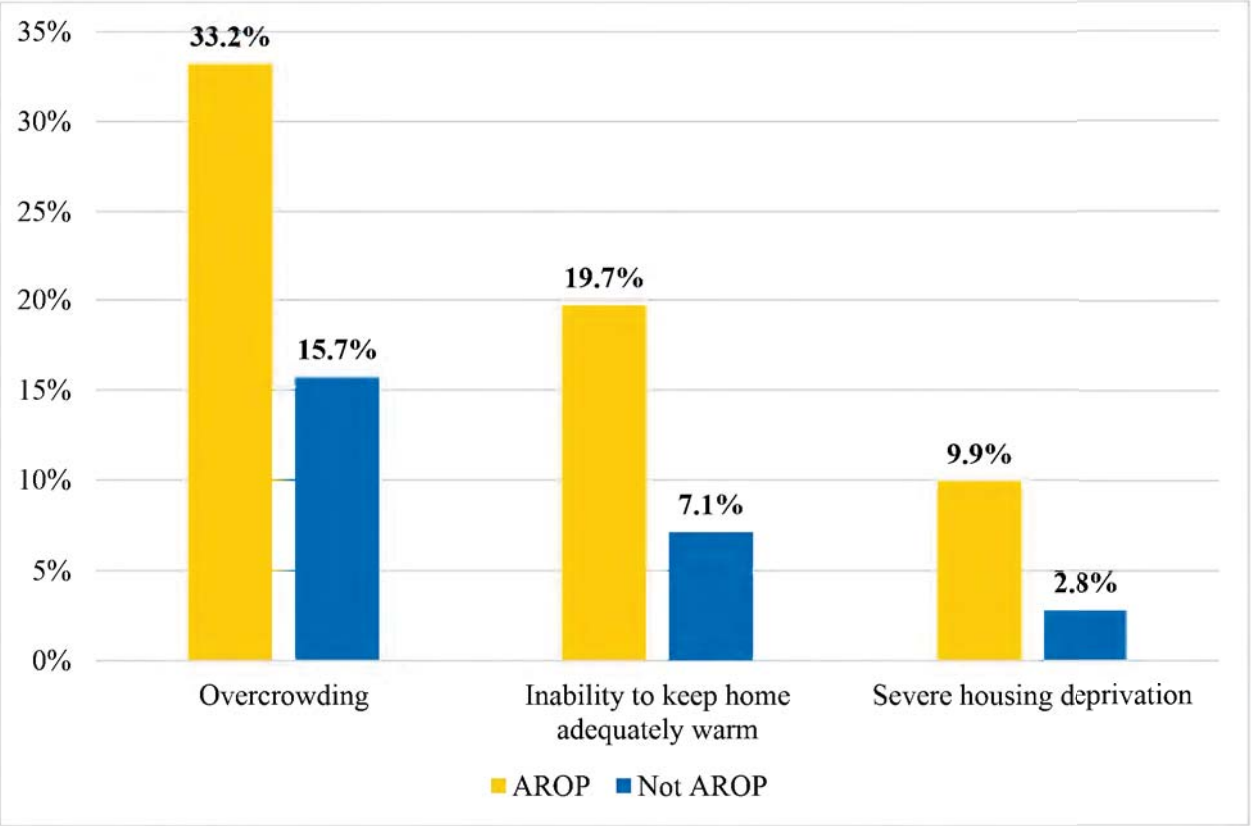
prices surged — with a steep rise between Q1 2015 and Q3 2022 by nearly 50%, a short period of stabilisation, and renewed growth since 2024 — outpacing nominal incomes and eroding real purchasing power. House prices are now about 60% higher than roughly a decade ago, while real median disposable income at EU level increased by only around 20% over that period, with growth highly uneven across Member States. As a result, although for some households income has kept pace, many now face more acute affordability pressures than before. 16.9% of the EU population lived in overcrowded conditions in 2024, with higher proportions often found in Eastern European Member States (see Section 3). In 2023, 4% of the EU population faced severe housing deprivation, living in overcrowded and unfit dwellings (Figure 22). Dampness, leaks, or rot affected about 16% of the EU population in 2023, negatively impacting health and well-being ([44]). Nearly half of the Roma/Traveller population (47%) lives in a state of housing deprivation ([45]), that is, often in damp, dark dwellings or housing without proper sanitation facilities. Four out of five Roma/Travellers (83%) live in a household that does not have enough rooms and is overcrowded. One out of five Roma/Travellers (17%) live without tap water inside their accommodation. Furthermore, based on different studies nearly one in two respondents of African descent (45%) ([46]) and Muslims (40%) ([47]) live in overcrowded housing.

Increasing housing costs affect people at risk of poverty disproportionally and exacerbate the risk of homelessness. In 2023, across the EU, approximately 5% of people reported experiencing housing difficulties in their lifetime with this percentage being more than two times higher for people at risk of poverty or social exclusion compared to people not at risk (8.4% against 3.9%). Groups in vulnerable situations, such as Roma, are more likely to be at risk of poverty, and to face housing difficulties, housing evictions and homelessness. 47% of Roma and Travellers live in damp, dark homes or housing without proper sanitation, and poverty has a significant impact on housing deprivation (47%) and 83% in overcrowded households ([48]). A rising trend can be identified regarding the number of people experiencing homelessness in several EU Member

([44]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Severe housing deprivation rate by age, sex and poverty status' [ilc_mdho06a] and 'Total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor' [ilc_mdho01], 2023, accessed 22/09/2025.
([45]) European Union Agency for Fundamental Rights, *Rights of Roma and Travellers in 13 European countries – Perspectives from the Roma survey 2024*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2811/9919091.
([46]) European Union Agency for Fundamental Rights, *Being black in the EU – Experiences of people of African descent,* Publications Office of the European Union, Luxembourg, 2023, https://data.europa.eu/doi/10.2811/327480.
([47]) European Union Agency for Fundamental Rights, *Being Muslim in the EU – Experiences of Muslims – EU Survey on immigrants and descendants of immigrants*, Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2811/2893.
([48]) European Union Agency for Fundamental Rights, *Rights of Roma and Travellers in 13 European countries – Perspectives from the Roma survey 2024,* Publications Office of the European Union, Luxembourg 2025, https://data.europa.eu/doi/10.2811/9919091.

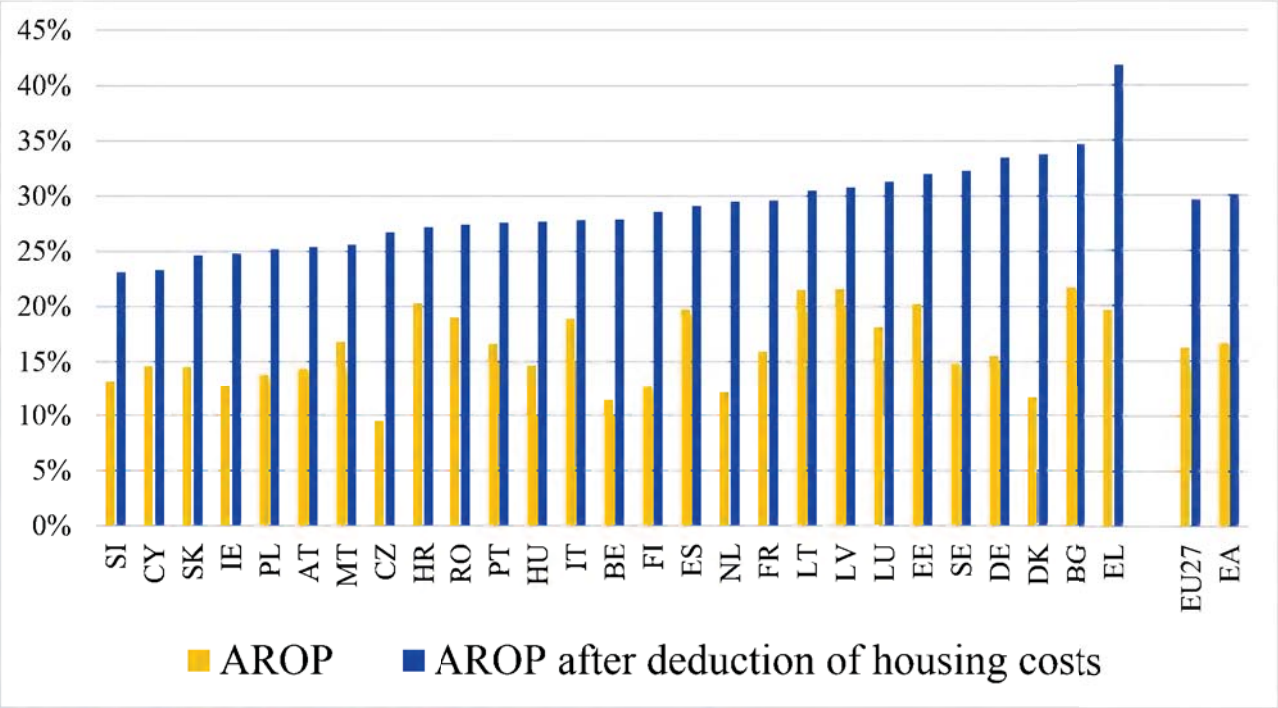
States, although the absence of harmonised data complicates cross-national comparison figures and monitoring progress.

Figure 22: Access to adequate housing by At-risk-of-poverty (AROP) status on average in the EU in 2024 (2023 for housing deprivation)



Source: Eurostat, (tessi172, ilc_mdes01 & sdg_11_11), accessed 11/12/2025.
Notes: AROP threshold: 60% of median equivalised income after social transfers.

Figure 23: At-risk-of-poverty rate (AROP) before and after deducting housing costs, 2024



***Source**:* Eurostat, (ilc_li45 & tespm010), accessed 27/10/25.

Notes: AROP threshold: 60% of median equivalised income after social transfers. AROP after deduction housing costs shows how much disposable income actually remains after housing costs and provides an adjusted assessment of households' financial situation.

High housing costs disproportionally affect groups at risk of discrimination and in vulnerable situations. The most adversely affected groups include young and older people, households with children, especially single parents, victims of domestic violence and groups at risk of discrimination (based on sex, age, racial or ethnic origin, such as marginalised Roma, religion or belief, sexual orientation, gender identity or/and sex characteristics). People with a disability face higher exposure to sub-standard housing conditions (e.g., damp/leaks/rot 18.9% vs 13.8%) or overcrowding ([49]). The 650.000 to 850.000 mobile workers performing seasonal work especially in sectors such as agriculture, forestry and fishing, as well as accommodation and food related services are regularly put in a disadvantageous position due to a lack of information or recourse or being blackmailed – or even trafficked – by exploitative employers[50]. Seasonal workers

([49]) European Commission: Eurostat, 'Statistics Explained - Disability statistics – housing conditions, European Commission website', accessed 27/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Disability_statistics_-_housing_conditions.

([50]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, *Intra-EU Mobility of Seasonal Workers Trends and Challenges Final Report March 2021*, Publications Office of the European Union, Luxembourg, 2021, https://data.europa.eu/doi/10.2767/173568.

face challenges with access to affordable housing; they were noted in France when sleeping under tents, inside trucks, on the ground, or in tiny dirty apartments with no electricity and water ([51]). A part of LGBTIQ+ people, in higher proportions than the general population, report they had to sleep rough in a public space at least once for a period in their life ([52]). Migrants are more likely to live in overcrowded and substandard housing compared to native-born residents and face a higher risk of exclusion in the housing market due to language barriers, and a growing risk of discrimination ([53]). The lack of places in shelters for victims of domestic violence is a major issue that often prevents victims to leave abusive relationships ([54]).

Racialised people often face discrimination and barriers in the housing market. They can include refusal to rent or sell, unequal terms and conditions to tenants or buyers, discriminatory advertising or financing discrimination. The EU Agency for Fundamental Rights (FRA) reported that 31% of people of African descent ([55]) and 26% of Muslims reported discrimination when

([51]) Based on information of the MoveS Network (Network of legal experts in Free Movement and Social Security coordination); included in: European Commission: Directorate-General for Employment, Social Affairs and Inclusion, *Intra-EU mobility of seasonal workers – Trends and challenges – Final report March 2021,* Publications Office of the European Union*, 2021*, p.55, https://op.europa.eu/s/AaeM.

([52]) See European Union Agency for Fundamental Rights (FRA), *A rights-based approach to affordable housing FRA input to the first EU affordable housing plan*, 2025, https://fra.europa.eu/sites/default/files/fra_uploads/fra-2025-submission-affordable-housing-plan-2025_en.pdf; European Union Agency for Fundamental Rights (FRA), *EU LGBTIQ Survey III*, 2023, https://fra.europa.eu/en/publications-and-resources/data-and-maps/2024/eu-lgbtiq-survey-iii and European Commission: Eurostat, *'2018 – Material deprivation, well-being and housing difficulties, Assessment of the implementation'*, 2020, https://ec.europa.eu/eurostat/documents/1012329/8706724/2018+EU-SILC+module_assessment.pdf.

([53]) European Parliament, Study requested by the PETI Committee, O'Sullivan, E., Benjaminsen, L., Busch-Geertsema, G., Filipovič Hrast, M., Pleace, N., Teller, N., *Homelessness in the European Union,* Policy Department for Citizens' Rights and Constitutional Affairs, 2023, https://www.europarl.europa.eu/RegData/etudes/STUD/2023/755915/IPOL_STU(2023)755915_EN.pdf; OECD/European Commission (2023), *Indicators of Immigrant Integration 2023: Settling In*, OECD Publishing, Paris, https://doi.org/10.1787/1d5020a6-en and European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Severe housing deprivation rate by age, sex and poverty status' [ilc_lvhd01], 2023, accessed 10/09/2025.

([54]) European Institute for Gender Equality (EIGE), 'Percentage of beds missing in women's shelters', Women Against Violence Europe (WAVE), 2020, https://dgs-p.eige.europa.eu/data/information/genvio_ser_qual__wave_beds_missing_pct.

([55]) European Union Agency for Fundamental Rights, Being black in the EU – Experiences of people of African descent, Publications Office of the European Union, Luxembourg, 2023, https://data.europa.eu/doi/10.2811/327480.

trying to rent or buy property ([56]). 35% of the surveyed Roma people experienced discrimination in the past 5 years ([57]).

Children living in inadequate and unstable housing often face serious social consequences. Child homelessness has risen significantly across Europe in recent years. In 2023, nearly 400,000 minors (0.4% of the total) were estimated to be homeless ([58]), living on the street, in emergency shelters or in temporary accommodation. Unstable or poor-quality housing disrupts education, and children can suffer mental and physical health damage, as well as social isolation. According to a 2023 study on children growing up homeless in the Greater Paris area 25% of these children suffered mental health issues, far above general population levels ([59]). Temporary shelters often lack facilities for cooking, studying, or playing, contributing to stress, shame, and developmental delays. These experiences can have long-term impacts on children's future prospects, perpetuating cycles of poverty and exclusion. 77% of Roma children are living at risk of poverty and are affected by lack of access to essential services such as tap water ([60]).

The lack of affordable housing can present a significant obstacle to enrolment in higher education, finding employment, exacerbating socioeconomic and regional inequalities. In most Member States, housing and living costs form the bulk of the direct cost of attending higher education. This is particularly true for programmes with high infrastructural costs and extensive laboratory components, such as those in Science, Technology, Engineering and Mathematics (STEM). According to the EIB, the affordable student housing gap represents 3.3 million dwellings ([61]). When affordable student housing is insufficient or non-existent, students and young

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([56]) European Union Agency for Fundamental Rights, *Being Muslim in the EU – Experiences of Muslims – EU Survey on immigrants and descendants of immigrants*, Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2811/2893.

([57]) European Union Agency for Fundamental Rights (FRA), *Rights of Roma and Travellers in 13 European countries – Perspectives from the Roma survey 2024*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2811/9919091.

([58]) Fondation Abbé Pierre-FEANTSA, 'Chapter 2 Children facing homelessness and poor housing a European reality', in: *Ninth overview of housing exclusion in Europe 2024,* 2024, https://www.feantsa.org/en/report/2024/09/19/report-9th-overview-of-housing-exclusion-in-europe-2024.

([59]) Estevez, M., Oppenchaim, N., Descarpentrie, A., Rambliere, L., Douay, C., Galera, C., Vandentorren, S., *Housing and psychosocial factors associated with mental health in children aged 6-12 years from homeless families in the Greater Paris area, France: the ENFAMS cross-sectional study*, Front Child Adolesc Psychiatry, 2023, doi: 10.3389/frcha.2023.113659.

([60]) European Union Agency for Fundamental Rights, Rights of Roma and Travellers in 13 European countries – Perspectives from the Roma survey 2024, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2811/9919091.

([61]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, European Investment Bank Group and PwC, 'Market Study: mobilizing investment in social infrastructure in the EU', 20 March 2025.

professionals are constrained in their educational and career choices and remain in the vicinity of their current location, ([62]) or face significant commutes.

4.1.2. Essential workers and supply of essential services

The lack of affordable housing impacts large parts of society, including most categories of essential workers, often with modest earnings, hindering their ability to live near work or support networks. Rising housing costs, particularly in some areas have forced low-income residents and some key workers like teachers or nurses to relocate to less expensive regions further away from place of employment ([63]) and/or to live in housing units that are much smaller than desired. This often leads to segregated communities, where only wealthier individuals can afford to live in certain areas (e.g. gentrification), undermining social cohesion and the diversity of neighbourhoods.

The increasing difficulties of some essential workers to find affordable housing that suits their needs in proximity to their workplace also has broader economic consequences and exacerbates inter-and intra-regional inequalities. First, workers facing housing stress (i.e. long commutes, insecurity, overcrowding) are less productive, have higher absenteeism, and are more prone to burnout. OECD-level research across 24 countries shows ([64]) that rising real house prices dampen labour productivity growth. Secondly, high housing costs inhibit labour mobility, exacerbating regional labour and skills shortages ([65]). As this also affects essential workers with below medium income and those who provide essential services to society (e.g. health, police, education, cleaning), many European cities and regions, particularly in the most pressured areas, find it increasingly problematic to ensure adequate public services, with a progressive degradation of their quality and equal access.

([62]) European Commission: Joint Research Centre, Alessandrini, A., Bernini, A., Deuster, C., Endrich, M. Natale, F. and Ueffing, U., *Demographic outlook on "right to stay" - Beyond the Letta report, Publications* Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/4989571.

([63]) European Economic and Social Committee (EESC), 'How cohesion policy, the Urban Agenda and civil society can help make housing affordable again – 597 Plenary session', EESC website, 29/07/25, accessed 03/12/25, https://www.eesc.europa.eu/en/news-media/news/how-cohesion-policy-urban-agenda-and-civil-society-can-help-make-housing-affordable-again.

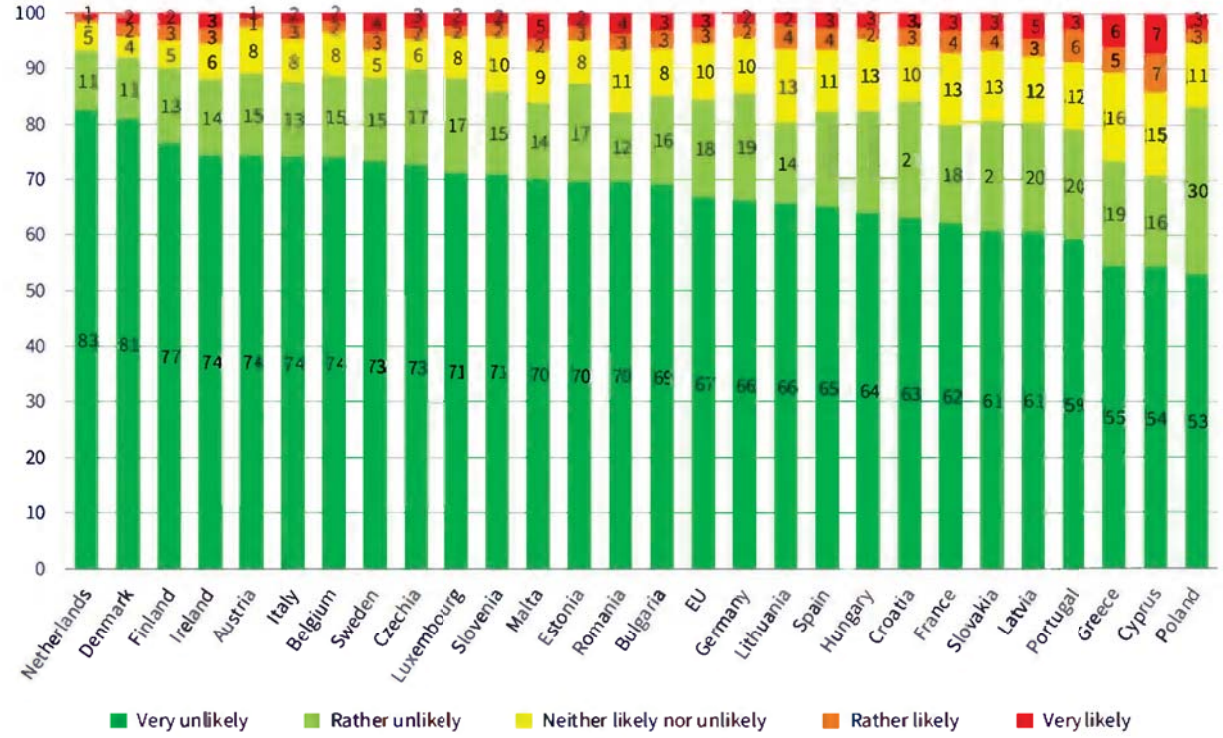
([64]) Economics Observatory, Reza Farzanegan, M. and Gholipour, H., 'How might house prices affect workers' productivity in OECD economies?', Economics Observatory website, 1 February 2024, accessed 28/10/2025, https://www.economicsobservatory.com/how-might-house-prices-affect-workers-productivity-in-oecd-economies.

([65]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'Chapter 3.4 Impact of housing policies on poverty reduction and upward social convergence', in: *Employment and Social Developments in Europe (ESDE) review*, 2024, https://op.europa.eu/webpub/empl/esde-2024/chapters/chapter-3-4.html.

4.1.3. Housing insecurity for tenants and landlords

In 2020-2022, 6% of the EU population perceived a high or very high risk of needing to leave their accommodation within the next three months because they can no longer afford it. This proportion substantially increased from 1% over the precedent decade. The proportion of housing insecurity was highest among tenants in the private sector (46% of them are considered at risks of leaving against 32% of landlords with a mortgage at risk) ([66]).

Figure 24: Likelihood of needing to leave accommodation within the next three months, 2020–2022 (%)



Source: Eurofound, 2023.

The share of people who reported rent or mortgage payment arrears decreased overall from 7.5% to 4.6% between 2011 and 2019; the share in arrears declined in 20 Member States and increased in 7 of them (most notably in Lithuania, Romania and Slovakia where the share increased

([66]) Eurofound, *Unaffordable and inadequate housing in Europe*, Publications Office of the European Union, Luxembourg, 2023, https://data.europa.eu/doi/10.2806/715002.

by over 5 percentage points amid an increase in mortgage holders). For tenants it declined on average from 9.3% to 6.3% ([67]).

The proportion of EU households in utility arrears dropped from a peak of 10.4% in 2013 to 6.2% in 2019. But energy costs sharply increased in 2022 ([68]). In spring 2022, 28% of people in the EU anticipated that it was likely that their household would face difficulties paying utility bills. Private tenants are at higher risk of expecting to face difficulties in paying for utilities. After controlling for all these factors, Denmark and Sweden stand out as countries where people feel most protected against the likelihood of facing difficulties paying for utilities; they feel least protected in Bulgaria, Greece and Romania.

It is challenging to make an EU-wide comparison on evictions. Data differ as regards the nature of the sources: eviction notices, procedures or orders, and if the data covers all evictions or only those conducted by the police. To illustrate this complexity, almost 36,000 eviction executions were applied in Austria for in 2020 (53,000 in 2019), but 4,106 evictions were actually executed. Around 12,000 evictions were annually applied in the Flemish Region of Belgium (2.5% of all private tenancies).

In some countries, the long-term trend is towards a reduction in evictions, with some deviations arising from temporary pauses on evictions during the pandemic. In Sweden, for example, evictions fell from 6,021 in 1991 to 2,672 in 2021. In Ireland, the disputes related to tenancy terminations fell from 1,505 in 2017, to 1,396 in 2018, to 1,345 in 2019 and to 524 in 2020. The number increased again in 2021, to 1,116.

Eviction data can also give an idea of the proportion of evictions caused by arrears (inability to pay). In Italy, in 2017, over 130,000 eviction orders and over 50,000 requests for enforcement were issued (32,000 of these requests were granted), about 90% for arrears. Data also indicate the extent to which evictions lead to homelessness. In the Flemish region of Belgium, one in six evictions results in homelessness.

4.1.4. Demographics and intergenerational fairness

Housing unaffordability can impact demographics. Young people are also more likely to live in overcrowded homes. On average 3 out of 10 people aged between 16 and 29 in the EU live in a

([67]) Eurofound, *Unaffordable and inadequate housing in Europe*, Publications Office of the European Union, Luxembourg 2023, https://data.europa.eu/doi/10.2806/715002.
([68]) Eurofound, *Unaffordable and inadequate housing in Europe*, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2806/715002.

situation of overcrowding, that is 9.2 percentage points above the population average ([69]). Lack of affordable housing leads to young people leaving their parents' home later ([70]) and may also delay the decision to have children and/or contribute to people choosing to have fewer children. There is emerging empirical research showing a correlation between rising house prices and fertility behaviour. For example, a 2025 study from the European Journal of Population finds that increasing house prices are associated with lower fertility rates — especially among renters or non-homeowners ([71]). If this trend continues, it could have consequences for the stability of social, health and long-term care systems in the long term. Almost half of young people aged between 18 and 34 in the EU lives at home with the parents ([72]). Even in countries where young people leave their parents' home relatively early the share of young people living at home with parents has increased significantly since 2008 due to changes in job security and housing costs.

Intergenerational differences in access to housing are bigger today than in the past, following disparities in real income and can lead - in turn - to disparities in wealth accumulation ([73]). According to Eurostat, between 2012 and 2020 overall homeownership declined across the EU, with falls exceeding 3 percentage points in six Member States ([74]). The share of homeowners among the age group of 25 to 35 has decreased by 16.3 percent between 2007 and 2024. The drop is most significant in Northern and Southern EU countries ([75]). Not only the gap in real income between the young and the elderly has increased in the last decade, but younger generations are also facing more challenges in achieving homeownership compared to previous generations, leading to disparities in wealth accumulation across their life.

([69]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Overcrowding rate by age, sex and poverty status - total population' (ilc_lvho05a), accessed 25/09/25.

([70]) European Commission: Eurostat, 'Statistics Explained - Young people – housing conditions, European Commission website, accessed 27/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Young_people_-_housing_conditions.

([71]) van Wijk, D., Feijten, P., *Rising House Prices, Falling Fertility? How Rising House Prices Widen Fertility Differences between Tenure Groups*, 2025, https://doi.org/10.1007/s10680-025-09754-6.

([72]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Estimated average age of young persons leaving the parental household' [yth_demo_030], 2024, accessed 02/12/25.

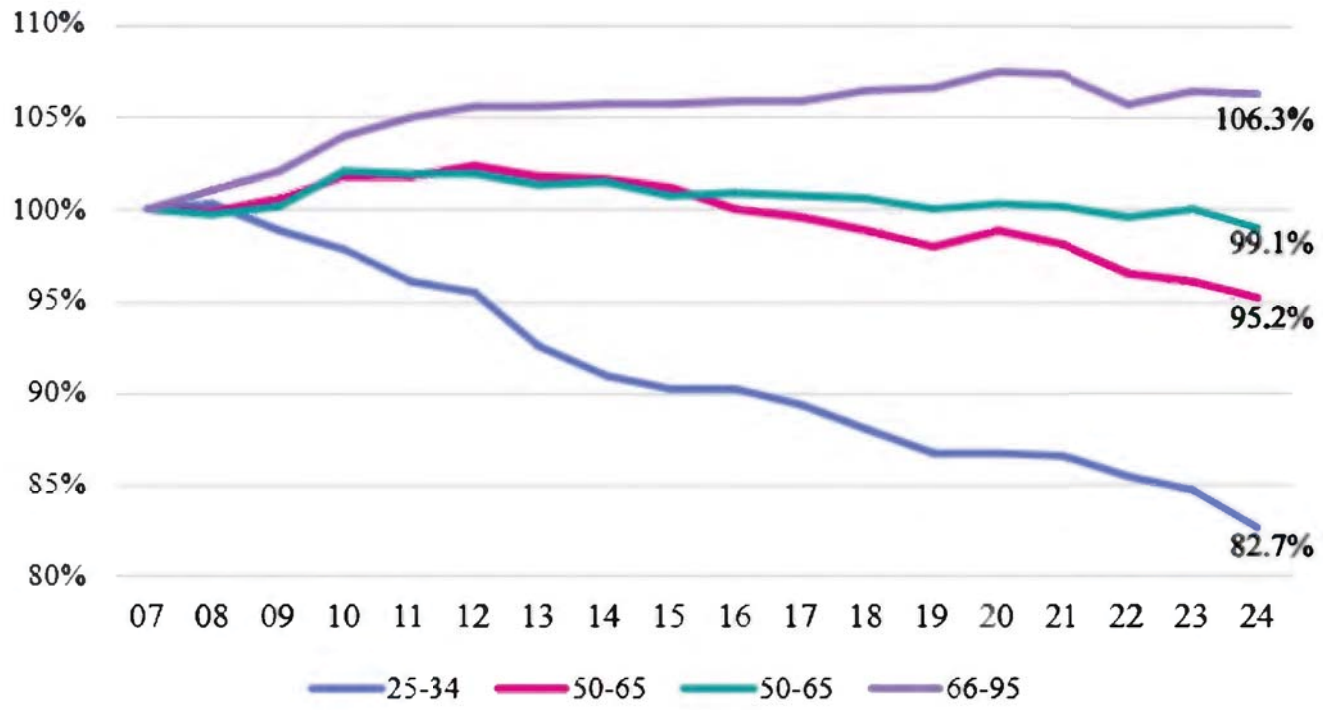
([73]) OECD, Balestra, C., Caisl, J. and Hermida, L., 'Mapping trends and gaps in households wealth across OECD countries', *OECD Papers on well-being and inequalities*, Working Paper No. 37, OECD Publishing, 2025, https://doi.org/10.1787/4bb6ec53-en.

([74]) Namely in Denmark, Cyprus, Spain, Lithuania, Finland and Bulgaria. Eurostat, 2021, see: European Commission: Eurostat , 'Owning or renting? What is the EU's housing situation?', European Commission website, 30/12/21, accessed 11/12/25, https://ec.europa.eu/eurostat/web/products-eurostat-news/-/wdn-20211230-1.

([75]) European Commission: Joint Research Centre, *Intergenerational fairness in the EU: income and housing dynamics in the context of demographic change*, Science-for-Policy Report, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/6294128, JRC144437.

Younger people, particularly those on lower incomes, are constrained by high house prices, tight credit conditions, and lagging income growth compared to older age groups over the last decades. By contrast, older households often own their homes outright and can draw on accumulated wealth and equity to purchase second and third dwellings, sometimes supported by favourable tax treatment and limited returns on alternative assets ([76]). This is accompanied by a growing inequality in intergenerational transmission of wealth as adults whose parents were homeowners are more likely to become homeowners themselves ([77]). While decisions and preferences for homeownership are influenced by many economic and social factors and policies, this divergence might have contributed to a rise in housing-wealth inequality both across and within generations, limiting social mobility ([78]).

Figure 25: Evolution of homeownership rate across age groups, EU27, 2007=100



Source: European Commission: Joint Research Centre, 2025, based on micro-data from EU-SILC
Notes: HU, HR, MT not included due to data gaps.

([76]) Meen, G., and Whitehead C.. *Understanding Affordability: The Economics of Housing Markets*, Bristol University Press, 2020, https://doi.org/10.1332/policypress/9781529211863.001.0001.
([77]) OECD, Balestra, C., Caisl, J. and Hermida, L., 'Mapping trends and gaps in households wealth across OECD countries', *OECD Papers on well-being and inequalities*, Working Paper No. 37, OECD Publishing, 2025, https://doi.org/10.1787/4bb6ec53-en.
([78]) Meen, G., and Whitehead C., *Understanding Affordability: The Economics of Housing Markets*, Bristol University Press, 2020, https://doi.org/10.1332/policypress/9781529211863.001.0001.

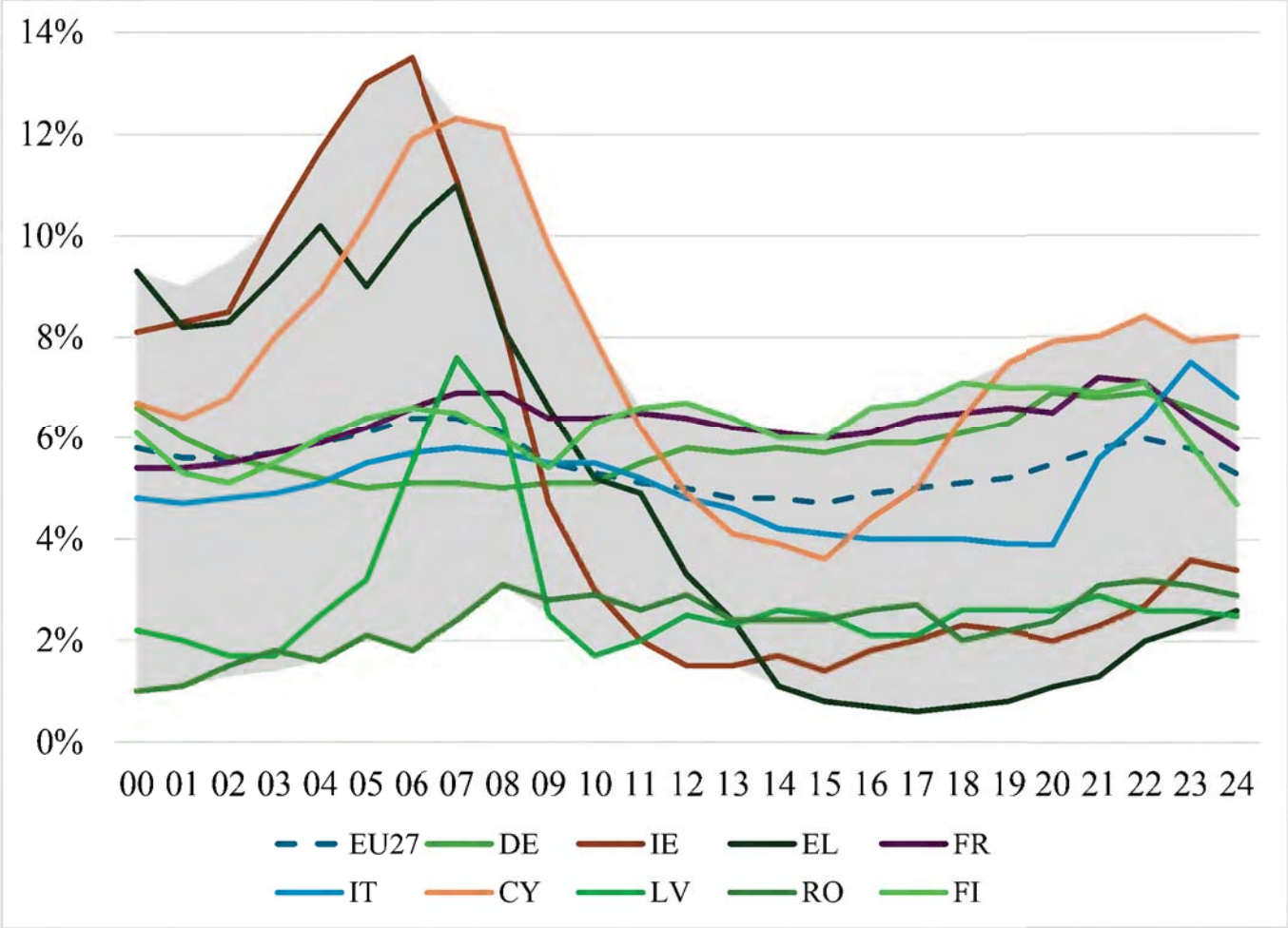
4.2. Economic consequences

Housing investment accounts for a significant share of GDP and can indirectly support competitiveness by facilitating labour mobility. At the same time, housing expenses absorb a substantial share of household disposable income, limiting the ability to spend on other goods and services. Preventing boom and bust cycles in housing markets is essential to maintain stability and prosperity in the financial sector and the broader economy. Moreover, inadequate affordable housing limits labour and educational mobility and hinders the efficient allocation of skilled workers, reducing competitiveness and economic growth.

4.2.1. Housing investment

Investments in dwellings contributed 5.4% of GDP in 2024 but shows significant variation across time and Member States. Since 2000, investments in housing, including construction of new homes, significant renovations, and associated transfer costs, fluctuated between 4.7 and 6.4% of GDP, with peaks during the boom years 2004-2008 and the lowest shares between 2011 and 2018 (seeFigure 26). Developments and levels across Member States differ significantly, as during the boom years in Ireland, Cyprus, Spain and Greece this share had reached double-digit levels and consecutively dropped partially below 1%, contributing to the economic contraction (see below on boom-bust cycles). Moreover, the pattern of housing investment is highly uneven also within countries.

Figure 26: Investment in dwellings, % of GDP, EU27 and selected Member States



Source: Eurostat (nama_10_an6), accessed 28/10/25.

Notes: The grey band represents the complete distribution of indicator values (e.g., severe housing deprivation) across the 27 EU Member States for each year. It highlights the minimum and maximum values recorded among Member States, with all other national observations situated within this range. Selected Member States are highlighted within this range, alongside the EU27 average.

4.2.2. Private consumption

Rising housing costs are a heavy burden for households across the EU, reducing their remaining disposable income and potentially dampening consumption and economic growth. Housing remains the largest household expenditure item in EU countries, for example being equivalent to over 35% in Greece and around 25% in Denmark and Germany of disposable income in 2024. In 2024, low-income households in the EU spent on average 37% of their disposable income on housing, compared with 16% for higher-income earners ([79]). Higher rents (or higher

([79]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Share of housing costs in disposable household income, by type of household and income group' (ilc_mded01), 2024, accessed 29/10/25.

mortgage payments) reduced disposable income available for other consumption and investment, particularly among lower-income households with higher marginal propensities to consume. Particularly tenants face an elevated risk of insufficient asset accumulation for retirement, a concern that also applies to homeowners in regions where housing assets are subject to value depreciation, such as in demographically shrinking areas. These factors can contribute to poverty across the EU.

Rising house prices boost the wealth of homeowners, but for low-income households they often force cuts in other expenditure to be able to cover housing costs. Housing expenses absorb a high share of disposable income and affect income distribution and aggregate demand. Rising house prices result in increased wealth for homeowners and can stimulate private consumption (wealth effect). Evidence from European countries shows that private consumption tends to move in parallel with house prices. Determining the causality between housing wealth and consumption is, however, challenging, as both can be influenced by the same factors as economic growth. Consequently, indirect housing wealth effects may have been overestimated in the literature and may be limited to households selling a property after prices increased. In contrast, financial wealth and higher current income have a more direct impact on consumption. The net effect of higher house prices and rents is a redistribution of disposable income from lower-income households - who have higher propensities to consume and thus stimulate growth - towards higher-income households, who have higher propensity to save.

4.2.3. Housing and business cycles

Boom-bust cycles were driven by a number of factors, which may include a surge in the volume of mortgages, and had major economic consequences, including playing a significant factor in systemic banking crises and economic recessions. Boom-bust cycles on housing markets were usually caused by excessive mortgage credit growth, which drove housing demand, and by excessive housing investment, often in locations where demand could not be sustained in the long term ([80]). During boom periods, rapidly rising house prices were leading to over-investment, over-leveraging by homeowners, and unsustainable levels of construction activity. Moreover, when the bust phase hit, it resulted in falling house prices, increased mortgage defaults, and foreclosures, leading to significant losses for financial institutions and investors. This caused increased financial instability including a greater risk of systemic banking crisis, a contraction in the availability of credit, reduced consumer spending, a sharp drop in construction activity and ultimately, a slowdown in economic activity. Regions heavily dependent on the housing

([80]) Höynck, C., Roma, M. and Schlieker. K, 'Developments in the recent euro area house price cycle', in: ECB Economic Bulletin, Issue 2, 2025, https://www.ecb.europa.eu/press/economic-bulletin/articles/2025/html/ecb.ebart202502_01~2f59dafb26.en.html; Jordà, O., Schularick, M. and Taylor, A., 'Leveraged bubbles', in: Journal of Monetary Economics, Volume 76, Supplement S1-S20, 2015 https://doi.org/10.1016/j.jmoneco.2015.08.0.

construction sector also experienced surges in unemployment, further exacerbating the economic downturn ([81]).

House price volatility tends to be higher in countries with high homeownership. Research shows that countries with high homeownership rates, such as Ireland, Spain or the UK, often face greater house price volatility due to the impact interest rate fluctuations have on mortgage credit flows ([82]). In contrast, housing systems with strong rental sectors tend to be more stable, as they limit the impact of credit shocks ([83]). A developed rental market, supported by regulations ensuring tenant protection and affordability, can stabilise prices by offering an alternative to homeownership, which can reduce pressure on house prices and mitigate housing bubble risks ([84]). However, besides the size of the rental sector, house price volatility is significantly influenced by other factors, like housing supply flexibility, degree of urbanisation, adequacy of local regulations, tax and benefit systems and macroeconomic conditions. Overall, the diversity of housing tenure (public, private, cooperative, social) can act as a stabilizing factor for housing markets across the EU, as a balanced mix of homeowners and renters dampens excessive price swings and enhances the resilience of the housing system to economic shocks and supports greater labour mobility.

The house price increases of the last decade have been principally driven by a structural imbalance between supply and demand due to supply responding slowly. Over the last decade, and notably since the pandemic, there has been a persistent and sustained increase in house prices (see section 1.1). This appears to be driven by a structural imbalance, arguably linked to declining supply elasticity (see Box 6.1) ([85]), i.e., where price increases occur more due to insufficient supply, rather than due to excessive demand. While interest rates were historically low during the 2010s, macroprudential measures such as Loan-to-value (LTV) caps kept credit growth under control in most EU countries and has significantly contributed to taming the risk of boom-bust cycles. As a result, the house price correction that started around 2023 has generally not had widespread economic consequences, and in 2025 house prices are growing again across the EU

([81]) Albuquerque, B., Cerutti, E., Kido, Y. and Varghese, R., *Not all Housing Cycles are Created Equal: Macroeconomic Consequences of Housing Booms*, IMF Working Papers, no 50, 2025, https://doi.org/10.5089/9798229002042.001.

([82]) Meen, G., and Whitehead C.. *Understanding Affordability: The Economics of Housing Markets*, Bristol University Press, 2020, https://doi.org/10.1332/policypress/9781529211863.001.0001.

([83]) Gibb, K., Leishman, C., Marsh, A., Meen, G., Ong Vifor, R. and Watkins C. (eds), *The Routledge Handbook of Housing Economics*, Routledge, 2024., https://www.routledge.com/The-Routledge-Handbook-of-Housing-Economics/Gibb-Leishman-Marsh-Meen-OngViforJ-Watkins/p/book/9780367347178.

([84]) Cuerpo, C., Kalantaryan, S. and Pontuch, P., *Rental Market Regulation in the European Union*, European Economy Economic Papers, no. 515, April 2014, Publications Office of the European Union, Luxembourg, 2014, https://op.europa.eu/s/Aafd.

([85]) Bank for International Settlements, Banerjee, R., Gorea D., Igan D. and Pinter G. (2024): *Monetary policy and housing markets: insights using a novel measure of housing supply elasticity*, *BIS Quarterly Review*, December 2024, 2024, https://www.bis.org/publ/qtrpdf/r_qt2412c.htm.

reflecting supply shortages, weighing on affordability. At the moment, the main concern does not seem to be the macroeconomic consequences of boom-bust cycles (e.g., banking crises), but rather the macroeconomic and social consequences of the lack of affordable housing (e.g., limited labour mobility towards the most productive regions).

4.2.4. Growth, innovation and competitiveness

Worsening housing affordability and availability reduce labour and educational mobility, weigh on economic growth, innovation and competitiveness. The lack of affordable housing intensifies labour and skills shortages in growing regions, with negative impacts on productivity, innovation and growth. High house prices and high new rents also hinder labour mobility, acting as a disincentive for workers to move to dynamic economic regions ([86]). This aggravates labour shortages, especially of scarce skilled workers. Economic studies show that decreasing housing affordability and availability has a negative effect on economic growth in large urban areas ([87]). This in turn reduces the positive impact of agglomeration effects – arising from the concentration of firms and workers in dense regions – which are a key driver of productivity, knowledge spillovers, and innovation ([88]). Dense labour markets facilitate matching between employers and employees, reduce transaction costs, and support specialised services and suppliers, which together accelerate economic growth. However, when housing becomes unaffordable in growth poles, these agglomeration benefits are undermined: firms lose access to broad and diverse labour pools, while workers are prevented from accessing opportunities for skill development and higher wages ([89]). At the same time, excessive agglomeration without sufficient housing and infrastructure provision

([86]) Causa, O., Abendschein, M. and Cavalleri, M., *The laws of attraction: Economic drivers of inter-regional migration, housing costs and the role of policies*, *OECD Economic Department Working Papers*, No. 1679, OECD Publishing, Paris, 2021, https://doi.org/10.1787/da8e368a-en; Eliasson, K. and Westerlund, O. (2023): *Housing markets and geographical labour mobility to high-productivity regions: The case of Stockholm*, European Urban and Regional Studies, Vol. 31, Issue 3, 259-280, 2023, https://doi.org/10.1177/09697764231210791; Bricocoli, M. and Peverini M., *No City for Workers: Housing Affordability Trends and Public Policy Implications in Milan. Urban Planning*, Volume *9*., 2024, https://doi.org/10.17645/up.8654.

([87]) Anthony, J., *Housing Affordability and Economic Growth*, Housing Policy Debate, Vol. 33, 2022, https://doi.org/10.1080/10511482.2022.2065328; Zhihao, H., Zhuoqun,L. Guanyun, C. and Xu, Z., 'From cost to creativity: Tracing the impact of housing affordability on innovation and entrepreneurship in urban China', *Habitat International*, Vol. 160, 2025, https://doi.org/10.1016/j.habitatint.2025.103382; Arnerić, J., Kikerec, M., and B. Skoko, B., 'Trends and drivers of housing affordability in the EU: Insights from panel data analysis', *Croatian Review of Economic, Business and Social Statistics (CREBSS),* Vol. 10, Issue 2, 49-62, 2024, https://hrcak.srce.hr/322831.

([88]) Maclennan, D., and Long, J., 'A Missing Perspective in Housing Economics: Productivity?', in: Gibb, K., Leishman, C., Marsh, A, Meen, G. Ong ViforG, R. et al. (eds), *The Routledge Handbook of Housing Economics*, , Routledge, London, pp. 149–162, 2024.

([89]) Hsieh, C.-T., and Moretti, E., 'Housing constraints and spatial misallocation', *American Economic Journal: Macroeconomics, 11*(2), 1–39, 2019, https:///doi.org/10.1257/mac.20170388.

leads to costs such as congestion, inequality, and exclusion, which can erode the competitiveness advantages that cities offer ([90]).

4.2.5. Public finances

Social housing in Europe - also referred to as public housing, or non-profit housing - is generally provided under state oversight, either directly by public authorities or through municipal companies and non-profit housing associations. While management and construction may be delegated, the state typically finances a significant share of investment, operating costs, or rent subsidies to ensure affordability for low-income households. The precise role of the state varies across countries, but it remains the main guarantor of access to socially supported housing.

Direct public investment in residential construction is modest, and the full picture of how much goes into publicly supported housing is unclear. General government spending on housing development, which averaged around 0.2 % of GDP before 2021, rose to 0.4 % in 2021 and 0.7 % in 2023, largely reflecting capital transfers. In 2023 (latest available), public investment in residential construction in the EU was just EUR 7 billion, equivalent to 0.04% of GDP ([91]). This can be partly attributed to the fact that social housing, in some Member States, is not included in general government.

Rental income from social housing is typically insufficient to cover construction and operational costs. Social housing rents contribute only modestly to revenue for public budgets, regularly remaining below construction and operational costs. In many European countries, social housing rents are set below full cost—i.e., allowing for renovation or maintenance, and providers often rely on public funding, cross-subsidies, or other sources to cover shortfalls ([92]). This in turn makes the supply of social housing vulnerable when public spending is reduced. While the deficit of the social housing sector in general remains limited (mostly around 0.2% of GDP), debt levels can be significant ([93]).

([90]) Duranton, G. and D. Puga 'Micro-foundations of urban agglomeration economies', in Henderson. J., and Thisse, J.-F. (Eds.), *Handbook of Regional and Urban Economics,* Vol. 4, pp. 2063–2117, Elsevier, 2004, 10.3386/w9931.

([91]) European Commission: Eurostat, 'General government expenditure by function (COFOG)', [gov_10a_exp], accessed 28/11/2025.

([92]) Housing Europe, 'Cost-based social rental housing in Europe', Housing Europe website, 13 December 2021, accessed 29/10/25, https://www.housingeurope.eu/cost-based-social-rental-housing-in-europe/; National Economic & Social Housing, *Financing of Social Housing in Selected European Countries*, NESC Secretariat Papers, No 11, 2014, http://files.nesc.ie/nesc_secretariat_papers/No_11_Financing_of_Social_Housing_in_Selected_European_Countries.pdf.

([93]) Council of Europe Development Bank, Omic, E., *Housing Inequality in Europe, Tackling inequalities in Europe: the role of social investment*, 2018, https://coebank.org/en/news-and-publications/ceb-publications/housing-inequality-in-europe/.

Social housing contributes to rent redistribution by alleviating inequalities in housing access, particularly for groups unable to secure adequate housing under market conditions, downplays the price pressures by providing housing supply at affordable prices, and make housing systems more resilient to housing market shock. Housing systems with a relatively large social housing share are likely to be more resilient and better prepared to respond to housing market shocks. While the share of social housing varies greatly across Europe, it has overall decreased in the last decades. Today, the EU average share of social housing is between 6 and 7% of the housing stock, accounting for around 28 million homes. Only three Member States have more than 20% of their housing stock classified as social housing: Netherlands (34.1% in 2021), Austria (23.6% in 2019), and Denmark (21.3% in 2022). Others like France (14% in 2018), Ireland (12.7% in 2016), and Finland (10.9% in 2021) fall between 10–20% ([94])

Social housing in some Member States forms part of the general government expenditure, so that their investment, deficit and debt count as part of public accounts. How social housing is recorded in national accounts depends on how this activity is organised, which can differ across Member States. Specific social housing data is not collected by Eurostat. The sector classification of units that provide social housing services in national accounts is determined according to the general criteria for sector classification set out in ESA 2010. Following these rules, depending on the characteristics of the service providers some are recorded within the general government sector, while others are recorded outside. The EU fiscal rules were reformed in 2024 to strengthen the conditions for inclusive growth, allowing for a more gradual, realistic and growth-friendly reduction in deficits and debt. The reformed EU fiscal rules aim at striking a balance between the need to ensure debt sustainability (conducive to macroeconomic stability) and the need for investments and reforms to ensure sustainable and inclusive growth. In the reformed EU governance framework, housing can be part of the set of reforms and investment underpinning an extension of the adjustment period from the standard four years to a maximum of seven years to the reference values of 3% and 60% of GDP.

Public social expenditure on housing can contribute to stabilising business cycles and can result in long-term fiscal savings, even if these are not their primary goals ([95]) and supporting independent living.

([94]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'ESDE review Chapter 3.4 – ESDE review - ESDE 2024 – Impact of housing policies on poverty reduction and upward social convergence', European Commission website, 2024, accessed 04/12/25, doi:10.2767/91555.

([95]) Austrian Institute of Economic Research (WIFO), Klien, M. and Streicher, G., The economic impacts of Limited-Profit Housing Associations in Austria – Summary of Key Key findings, 2021, https://bccm.coop/wp-content/uploads/2024/05/2021-Summary-WIFO-study_The-economic-impacts-of-limited-profit-housing-associations.pdf; Künn, S. and Palacios, J. *Health Implications of Building Retrofits:*

Housing allowances are one of the most widely used instruments of housing support. In 2023 (latest available), EU Member States collectively spent around EUR 63 billion on income-targeted housing supports (rent subsidies, housing allowances, and other forms of financial assistance) ([96]). In 2022, public spending on housing allowances across Europe ranges from between 0.1% and 0.3% of GDP in Czechia, Greece, Ireland, and Sweden to more than 0.8% in Finland ([97]). In 2022, housing allowances decreased the AROP rate by an estimated 1.4 percentage points (from 17.7% based on AROP rate before housing allowances to 16.3% of AROP rate) in the EU on average, with the biggest decreases in Finland (4.3 pp), Ireland (3.5 pp), France (3.1 pp) and Germany (3.0 pp) ([98]).

On the revenue side, property-related tax revenues represent a relatively modest but stable share of GDP across the EU ([99]). Property-related taxes include a wide range of instruments, including stamp duties, recurrent taxes on land and buildings. While the absolute levels vary significantly between Member States, these taxes generally account for less than 2% of GDP in total. Recurrent taxes on property are usually the most significant source of property tax income, followed by transfer taxes (e.g. stamp duties) that are also significant in several Member States. Beyond revenue generation, property taxes can also be used as a policy tool to support housing affordability, for example through exemptions, reduced rates for affordable housing, or incentives

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Evidence from a Population-Wide Weatherization Program, Journal of Health Economics, 2024, https://doi.org/10.1016/j.jhealeco.2024.102936.

([96]) Housing Europe, *The State of Housing in Europe 2023*, 2023, https://www.housingeurope.eu/the-state-of-the-housing-in-europe-2023-2/; European Commission: Eurostat, 'Expenditure on housing function by type of benefit and means-testing', [spr_exp_fho], accessed 11/12/25 and European Commission: Eurostat, 'Statistics Explained - Government expenditure on housing and community amenities, accessed 29/10/2025, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Government_expenditure_on_housing_and_community_amenities.

([97]) OECD, 'Affordable Housing Database', Indicator PH3.1.1: Public spending on housing allowances in OECD countries, 2022, https://webfs.oecd.org/Els-com/Affordable_Housing_Database/PH3-1-Public-spending-on-housing-allowances.pdf; European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'ESDE review Chapter 3.4 – ESDE review - ESDE 2024 – Impact of housing policies on poverty reduction and upward social convergence', European Commission website, 2024, accessed 04/12/25, doi:10.2767/91555.

([98]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'ESDE review Chapter 3.4 – ESDE review - ESDE 2024 – Impact of housing policies on poverty reduction and upward social convergence', European Commission website, 2024, accessed 04/12/25, doi:10.2767/91555.

([99]) European Commission: Directorate-General on Taxation and Customs Union, *Data on Taxation Trends – Tax revenues by tax base: Property taxes*, updated March 2025, accessed 30/10/25, https://taxation-customs.ec.europa.eu/taxation/economic-analysis/data-taxation-trends_en and European Commission: Directorate-General on Taxation and Customs Union, *Data on Taxation Trends - Methodological and explanatory notes*, 2025, https://taxation-customs.ec.europa.eu/document/download/9392a0fe-fc17-4cb6-b9c9-56e71f21caec_en?filename=Methodology2025.pdf.

for non-profit and social housing providers. In general, the use of comprehensive, up-to-date recurrent property taxes within the tax mix is considered one of the most economically efficient and non-distortive ways of raising tax revenue ([100]).

Many Member States support homeowners by significant tax exemptions. Homeownership policies have traditionally been supported by tax exemptions or reliefs, such as tax rebates on mortgage interest payments, tax exemptions for capital gains on primary residences and preferential tax treatment for primary residences. Taken together, owner-occupied housing is often more favourably taxed in comparison with financial investments. The fiscal cost of these measures can be significant, as high as 1.3% of national GDP in the case of the Netherlands ([101]). Moreover, these measures can have counterproductive effects; notably by driving up housing prices they worsen purchase affordability for prospective buyers and can contribute to excessive household debt and macroeconomic instability ([102]). For this reason, several Member States have removed or at least limited the tax deductibility of mortgage interest payments (for instance applying it to primary residences only) in the last decade, following Commission and Council recommendations.

4.3 Environmental impacts

Addressing the lack of affordable housing typically requires expanding the building stock and renovating existing dwellings and therefore the environmental impact needs to be taken into account. Construction activities require resources, and these activities account for about half of all extracted material in the EU ([103]). Mining and quarrying for raw materials needed for construction products can lead to significant environmental impacts like biodiversity loss and land use change. Some construction materials, in particular concrete (75% of which ends up in buildings), are linked to significant greenhouse gas (GHG) emissions due to releases during their production (cement) or the energy required for their processing. It is estimated that 6% of Europe's

([100]) See for example: Arnold, J., 'Do Tax Structures Affect Aggregate Economic Growth?: Empirical Evidence from a Panel of OECD Countries', *OECD Economics Department Working Papers*, No. 643, OECD Publishing, Paris, 2008, https://doi.org/10.1787/236001777843; Johansson, Å., Heady, C., Arnold, J., Brys, B., Vartia, L. , 'Taxation and Economic Growth', *OECD Economics Department Working Papers*, No. 620, OECD Publishing, Paris, 2008, https://doi.org/10.1787/241216205486.

([101]) OECD, *OECD Economic Surveys: Netherlands 2023*, OECD Publishing, 2023, https://doi.org/10.1787/dbda2baf-en.

([102]) European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, https://op.europa.eu/s/z99T.

([103]) European Environment Agency, *Analysing material footprint of the EU: Trends and changes from 2010 to 2021 – Technical note on the methodology and additional results underpinning the EEA briefing: From data to decisions: material footprints in European policy making*, 2024, p.26, https://www.eea.europa.eu/en/analysis/publications/material-footprints-in-european-policy-making/analysing-material-footprint; using data from: European Commission: Eurostat, 'Material footprints – details by final use of products' [env_ac_rmefd], 2024, accessed 31/10/2025.

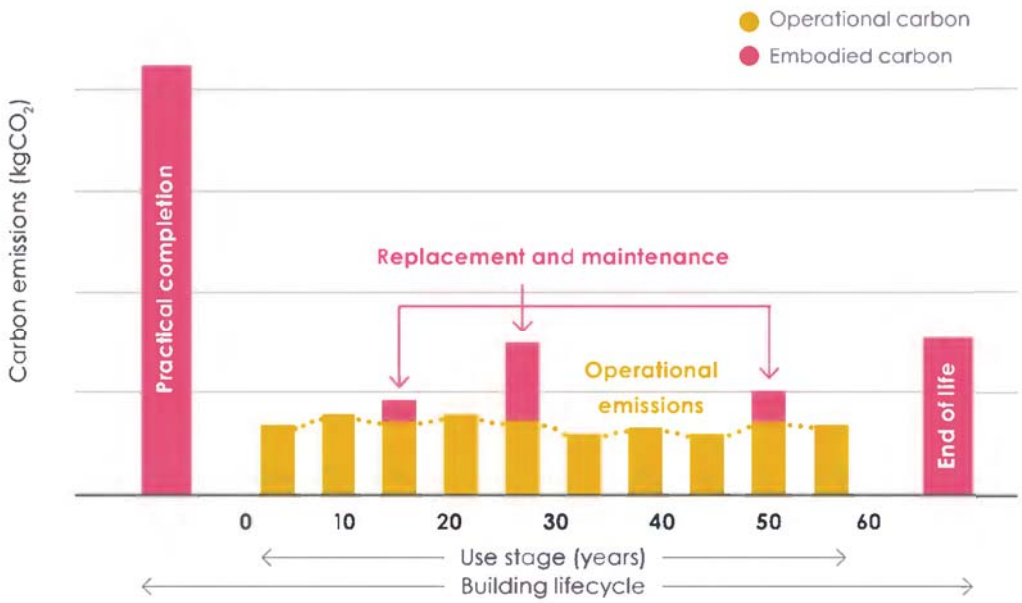
carbon emissions are due to carbon embedded in construction products ([104]). An increase in material efficiency could save 80% of them. The construction sector is responsible for almost 40% of the EU's total waste generation. Furthermore, open land provides environmental services, including at the neighbourhood level, reducing air and noise pollution, improving water management, or limiting the urban heat island effect for instance. In light of the environmental impacts of construction, when designing policy options (not discussed here) to improve affordability and availability of housing, due attention needs to be given to solutions that focus on a more efficient use of the existing building stock. This includes densification, reuse / repurposing, addressing vacant properties, etc., all of which can lead to significant savings in materials and emissions.

The environmental impact of buildings in terms of waste and material use is concentrated during the construction phase, while most green-house gas emissions relate to the use phase of buildings. Overall, 20-35% of the total environmental impacts of a building's life cycle occurs during the product stage, when natural resources are extracted for construction products and components, while most of the waste is generated at the de-commissioning phase. Using reused building materials and those derived from recycling, employing natural building materials (such as wood, clay and stone), and extending the life cycle of buildings can reduce the environmental impact of buildings and the emissions related to construction. Transport of construction products accounts for around 30% of all urban goods transport, contributing to air pollution, traffic congestion and increased noise levels (70-120 dB in the vicinity of a construction site). During construction, toxic dust from cement and silica also contributes to particulate matter PM10 emissions.

Buildings are responsible for more than 40% of the EU's final energy consumption, 52% of natural gas consumption, around one-third of annual GHG emissions, and around one third of all materials consumed annually in the EU ([105]). Building life cycle emissions are split between operational emissions (heating, cooling, lighting) and embodied emissions (material production, transportation, construction, and end-of-life processes). Although operational GHG emissions due to the use of energy in the building still represent the largest buildings emissions share, the importance of embodied emissions, primarily driven by the production of materials used in construction, is growing ([106]).

([104]) European Environment Agency, *Addressing the environmental and climate footprint of building,* EEA Report, 2024, doi: 10.2800/1800539.
([105]) European Environment Agency, *Addressing the environmental and climate footprint of building,* EEA Report, 2024, doi: 10.2800/1800539.
([106]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, BPIE, KU Leuven, Ramboll and TU Graz, *Analysis of life-cycle greenhouse gas emissions of EU buildings and construction – Analysis of results and implications*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2873/2247112.

Figure 27: Emission breakdown of a building's life cycle ([107])



***Source**:* Low Energy Transformation Initiative (LETI), 2020.

During the use stage, the primary source of GHG emissions and other air pollutants is the operation of buildings due to energy consumption. Although zero-emission building standards are planned for new buildings being constructed as from 2030, operational emissions will still constitute a larger portion of the total buildings' emissions. To reduce this share, a continued focus on improving the energy performance of existing buildings is necessary. This will also save costs for households and improve quality of life (see Section 5).

The most important environmental impacts at end of a building's life are linked to the management of the great quantities of demolition waste, including hazardous materials. The greatest environmental impact at the end of building's life is associated with construction and demolition waste (CDW). It is estimated that in the EU, the total CDW outflow resulting from demolition and renovation activities will double, in absolute terms, between 2020 and 2050 ([108]). End-of-life concerns building decommissioning activities including building demolition, transporting, and managing construction and demolition waste. Demolishing old buildings also carries the risk of releasing hazardous substances such as asbestos and PCBs. By using sustainable materials that are fit for re-use and recycling, the end-of-life costs can be reduced in the future.

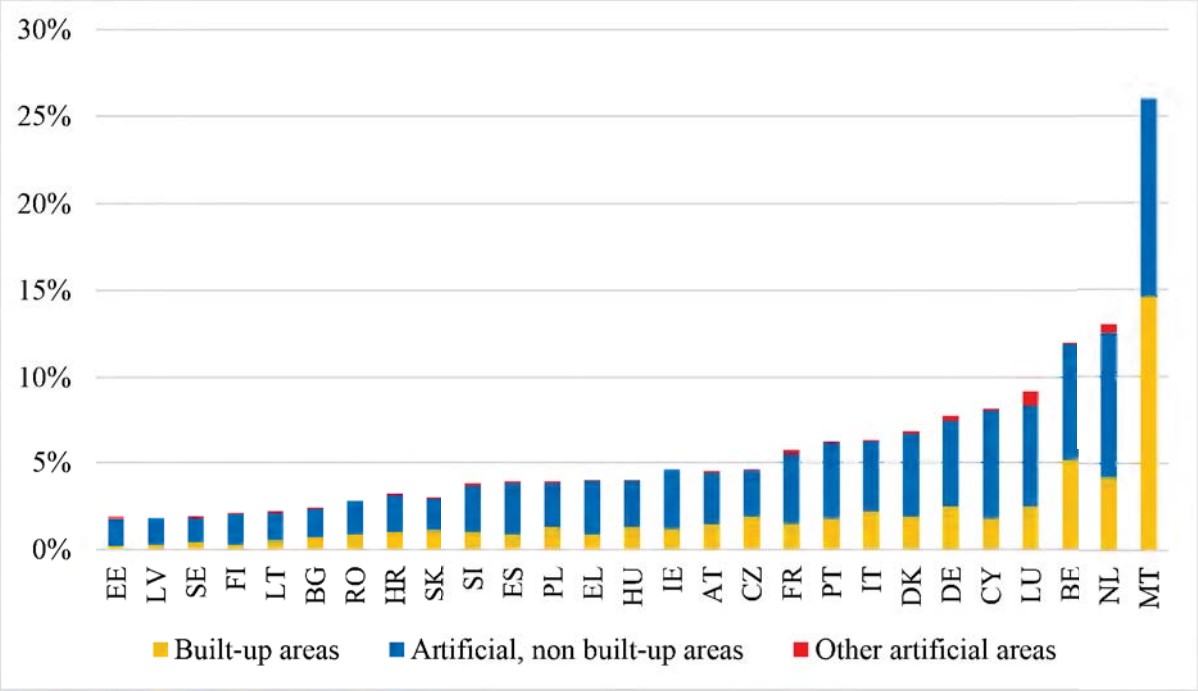
([107]) A standard life cycle of 50-60 years for residential buildings is commonly used in literature and sector's publications.

([108]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *EU construction & demolition waste management protocol including guidelines for pre-demolition and pre-renovation audits of construction works - Updated edition 2024*, Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2873/77980.

Urban land-use in the EU is increasing due to (sub)urban sprawl driven by demographic and economic growth, as well as the continued development of infrastructure. Artificial land cover includes built-up areas, roads, and other paved surfaces, reflecting human development. Since land is a finite resource, increasing demand for living space, expanding levels of economic activity and rising mobility have, in some cases, led to loss of natural resources and environmental degradation. Land cover data help understanding how environmental systems function, and the impact that any changes in land cover may have on biodiversity and ecosystems ([109]). Between 2018 and 2022, the area of artificial land cover increased by 3.5%. In 2022, artificial land cover accounted for 4.4% of the EU's total area. Countries with high population density tend to report high shares of artificial land cover. Among the EU countries, shares ranged from 1.9% in Latvia up to 25.9% in Malta. In every EU country except Malta, the proportion of land covered by non-built-up areas (e.g. linear transport networks and related infrastructure) exceeded that of built-up areas (buildings). In Lithuania, Spain, Greece, Cyprus, Sweden, Latvia, Finland and Estonia, non-built-up areas accounted for at least 3 times the area covered by built-up areas (see Figure 7). Mixed-use buildings combining commercial real estate on the ground level with residential units in the upper floors can help reduce the land-use.

Figure 28: Artificial land cover, in % of total area, 2022

([109]) European Commission: Eurostat, 'Statistics Explained - Land cover statistics', European Commission website, accessed 29/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_statistics.



***Source**:* Eurostat (lan_lcv_ovw), accessed 28/10/2025.

5. SHIFTS IN HOUSING DEMAND

This section reviews key drivers of housing demand such as economic and demographic fundamentals, capital flow mechanisms and short-term rentals. The main demand-side drivers in EU housing are economic factors (income, wealth, mortgage rates and credit conditions) and demographic fundamentals (population change, urbanisation, house structure, migration), capital flow mechanisms (financialisaton, speculation, golden visas and residence schemes), housing policies, as well as short-term accommodation rentals booked via online platforms. Income and wealth are the main factors determining households' purchasing capacity, together with interest rates and credit conditions. Recurrent property taxation, transaction taxes, VAT settings and targeted subsidies influence housing transactions and, through them, home prices, which have a secondary impact on mobility and affordability. Population growth, migration, urban concentration and the rise of single-person households raise the number of dwellings demanded and change the characteristics of housing demand, while an ageing population increases the need for accessible homes. This chapter also reviews financialisation, the limited evidence on speculation, as well as the price impacts linked to golden-visa and residence schemes. Finally, STRs is a growing, spatially concentrated demand on the existing housing stock.

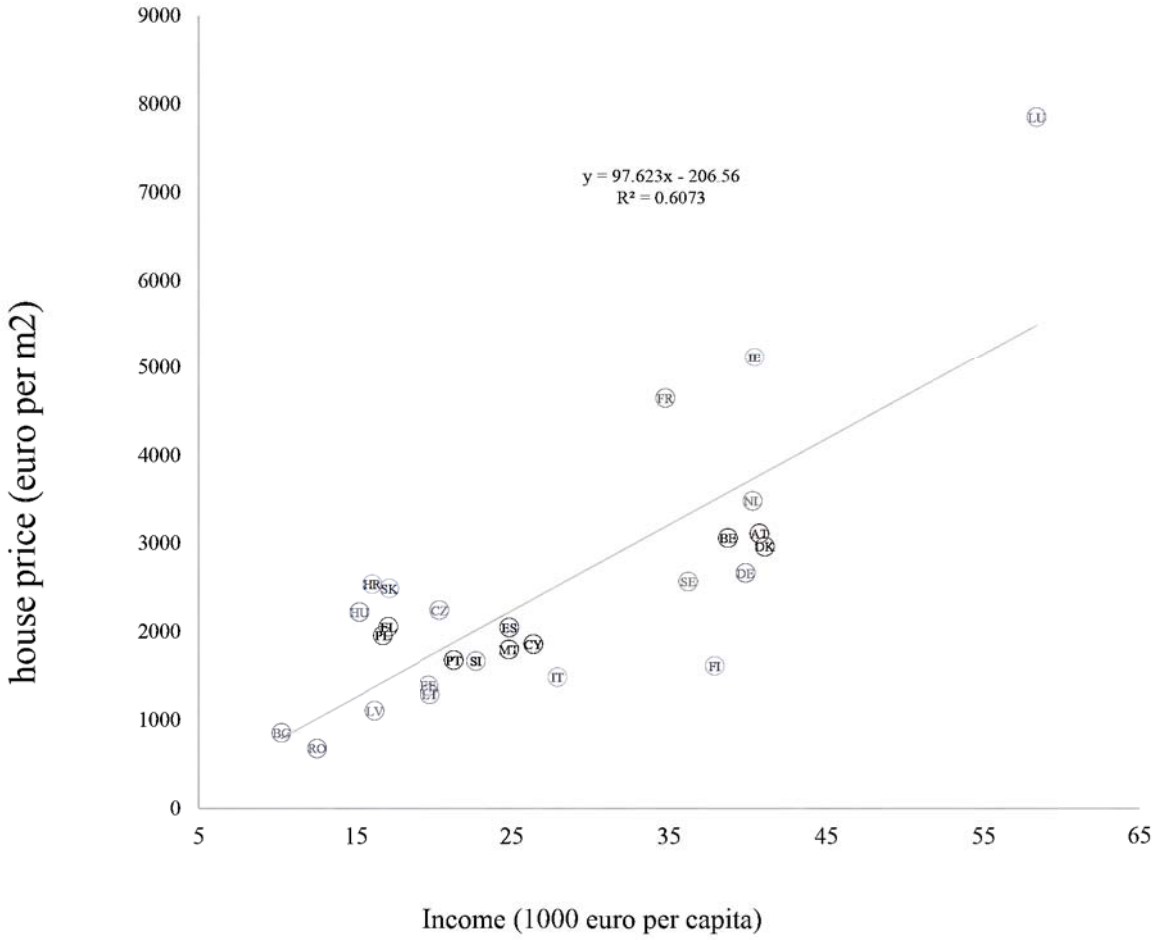
5.1. Fundamentals and key policies driving housing demand

Household income is the main driver of housing demand and price movements over time. Household income has repeatedly been identified as the main determinant of housing market activity and price movements ([110]). As incomes rise, households not only can afford more expensive housing but also qualify more easily for mortgages, directly driving demand and house prices ([111]). The income-price relationship has been strong in both housing market upswings and corrections, reflecting shared macroeconomic drivers such as GDP and employment growth, even if other factors such as interest rates, demographic shifts, and policy interventions also impact housing demand. Across EU countries, differences in income levels largely explain cross-sectional differences in house prices and rents, with price per m² rising alongside income per capita (Figure 29).

([110]) Holly, S. and Jones, N., 'House prices since the 1940s: Cointegration, demography and asymmetries', *Economic Modelling*, Volume 14, Issue 4, 199, pp. 549-565,1997, https://doi.org/10.1016/S0264-9993(97)00009-6; European Commission: Directorate-General for Economic and Financial Affairs, Frayne, C., Szczypińska and Vašíček, B., *Housing Market Developments in the Euro Area: Focus on Housing Affordability*, European Economy Discussion Papers, No 171, September 2022, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/s/z99W.

([111]) Cheshire, P. and Sheppard, S., 'Estimating the Demand for Housing, Land, and Neighbourhood Characteristics', in: *Oxford Bulletin of Economics and Statistics*, Vol. 60, Issue 3, pp. 357-382, 1998, https://doi.org/10.1111/1468-0084.00104.

Figure 29: House price per m2 vs household income per capita, 2024, EU27



Source: European Commission: DG Economic and Financial Affairs, 2025, own calculations based on Eurostat data.
Notes: The dashed line corresponds to the simple regression. Income refers to adjustable disposable income.

Income growth and house price growth have a strong relationship, but recently the link weakened in Europe. The relationship between income and house price growth was strong both in periods of housing market expansion (2000-2007, 2014-2022) and correction (2008-2013, 2022-2024), influenced by the same underlying macroeconomic factors, such as GDP growth and

employment. However, this relationship did loosen recently in the EU ([112]), as low interest rates, the development of teleworking, pandemic-era preference shifts and inadequate supply response pushed up house prices, weighing on housing affordability ([113]). For a more detailed description of the house-price to income ratio see Section 1.1.

Besides income, household wealth also increases housing demand. While income influences the ability to make mortgage payments, accumulated wealth is essential for affording down payments or cash purchases ([114]). Wealthier households find it easier to participate in the housing market as buyers, but also as investors, acquiring properties for rental income or capital appreciation. Investment in housing in attractive areas draws wealth from other regions and leads to decreased affordability in these areas. This trend is particularly visible in tourism hot spots in some EU countries like Southern Spain of coastal regions in Croatia (see also Section 1.3.3).

Mortgage interest rates have been one of the levers shaping EU housing demand over the past decade. Despite the notable cross-country differences (see Box 1.1 on tenure status), mortgage credit represents the main source of funding for housing transactions across EU countries and interest rates are the main determinant of mortgage borrowing. After the global financial crisis and through the pandemic years, a long period of very low interest rates increased mortgage demand. Coupled with limited housing supply, this created a strong upward pressure on housing prices, reaching approximately 6% y-o-y by 2022.

From late-2021, policy rate hikes passed through to mortgage interest rates, which cooled borrowing activity and resulted in a moderate decline in house prices. As from the second half of 2021, European central banks started raising policy rates that translated into higher mortgage rates. This reduced housing demand, resulting in a decrease in both transactions and prices ([115]). House prices peaked in Q3 2022 and then fell, but the drop was limited to a 3% cumulative decline over 18 months. The downturn was both modest and short-lived, as, housing demand started increasing again in 2024–2025, responding to a moderate decrease in interest rates (Figure 30).

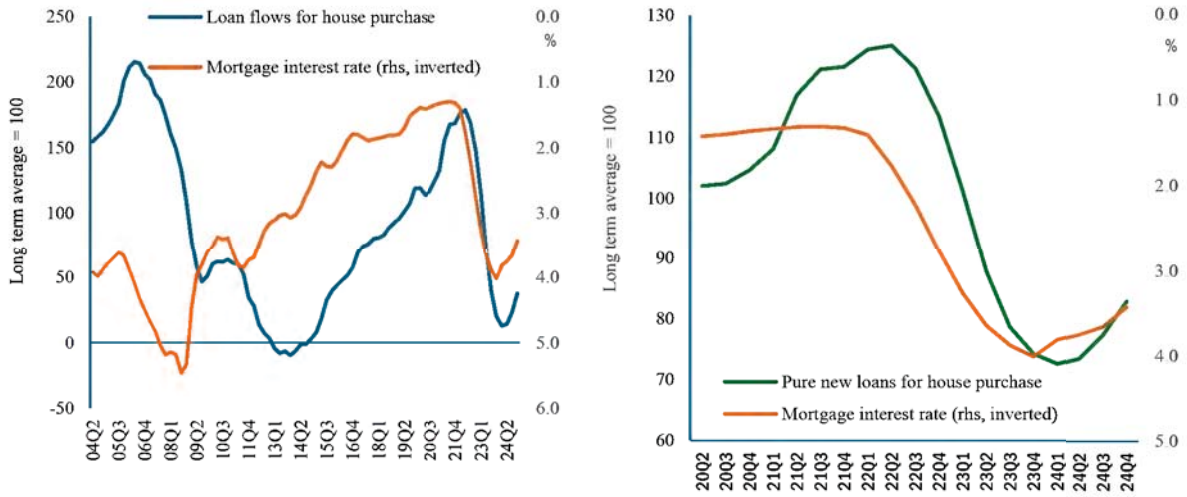
([112]) United States Federal Reserve Board, Gallin, J., *The Long-Run Relationship between House Prices and Income: Evidence from Local Housing Markets*, 2003, https://www.federalreserve.gov/pubs/feds/2003/200317/200317pap.pdf.

([113]) European Commission: Directorate-General for Economic and Financial Affairs, Frayne, C., Szczypińska and Vašíček, B., *Housing Market Developments in the Euro Area: Focus on Housing Affordability*, European Economy Discussion Papers, No 171, September 2022, Publications Office of the European Union, Luxembourg, 2022, https://op.europa.eu/s/z99W.

([114]) Hochstenbach, C. and Aalbers, M., 'The uncoupling of house prices and mortgage debt: towards wealth-driven housing market dynamics', in: *International Journal of Housing Policy*, Vol. 24, Issue 4, pp. 642–670, 2023, https://doi.org/10.1080/19491247.2023.2170542.

([115]) European Central Bank, *The euro area bank lending survey – First quarter of 2023*, ECB Surveys, European Central Bank website, accessed 30/10/2025, https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2023q1~22c176b442.en.html.

Figure 30: Mortgage loans vs. mortgage interest rate (%), Euro area



***Source*:** European Commission: DG Economic and Financial Affairs, 2025, own calculations based on ECB data.

Macroprudential measures helped avoid a credit-fuelled house-price bubble but restrict access to the credit market for some groups. In addition to interest rates, an important factor in mortgage lending are credit conditions, which determine the borrowing capacity of potential buyers. Macroprudential policies, besides their primary goal to ensure financial sector stability, play an important role in smoothing housing-market cycles ([116]), through borrower-based caps, amortisation requirements and down-payment rules and are most effective when accompanied by lender-side capital tools ([117]), Their use has broadened across the EU over the last decade. A core instrument is the "Loan-to-Value (LTV)" limit, which constrains the mortgage size compared to the property's value. Legally binding LTV limits exist in 22 Member States, ranging from 80% (Czechia) to 100% (Netherlands); such limits reduce new mortgage credit and brake house-price

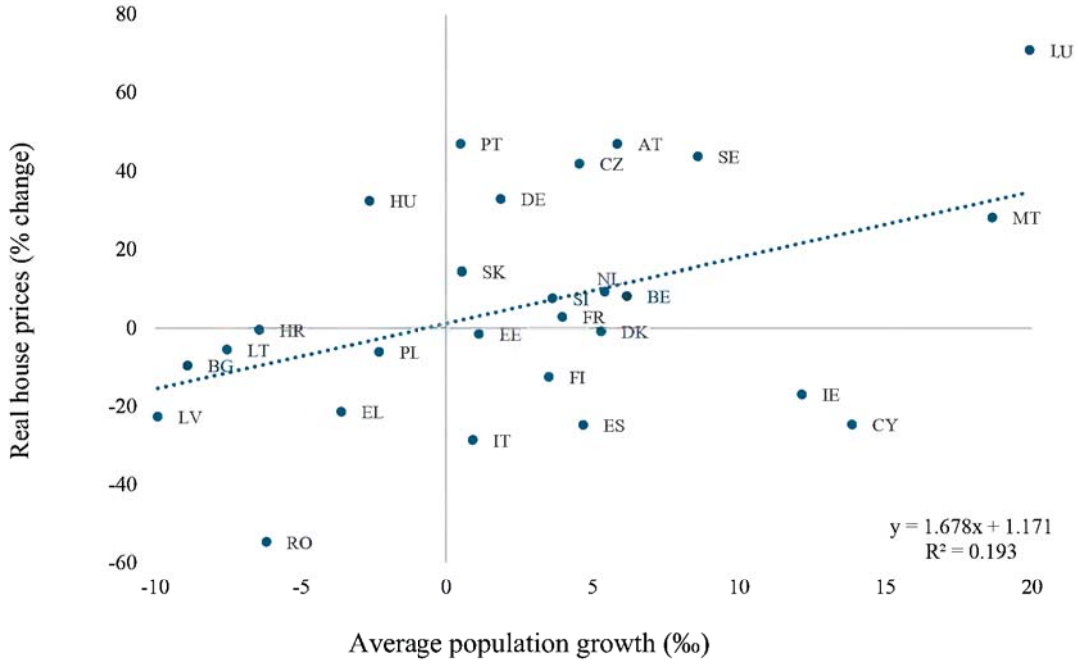
([116]) Giannoulakis, S., Forletta, M., Gross, M. and Tereanu, E., *The effectiveness of borrower-based macroprudential policies*, European Central Bank (ECB) Working Paper Series, No 2795 / March 2023, Publications Office of the European Union, Luxembourg, 2023, doi: 10.2866/24815.

([117]) International Monetary Fund, Arena, M., Chen, T., Seung, M.., Geng, N., Gueye, C., Lybek, T., Papageorgiou, E. and Zhang, Y., *Macroprudential Policies and House Prices in Europe,* 2020, https://doi.org/10.5089/9781513512259.087; European Central Bank, Hannes Lang, J., Behn, M. Jarmulsa, B. and Lo Duca, 'Real Estate market, financial stability and macroprudential policy', *ECB Macroprudential Bulletin*, no 19, October 2022, 2022 https://www.ecb.europa.eu/press/financial-stability-publications/macroprudential-bulletin/html/ecb.mpbu202210_1~53d521bde7.en.html.

growth ([118]). However, they can also make mortgage financing harder to access for first-time buyers or young families.

A growing population increases long-term housing demand, resulting in more people needing a home and a growth in the number of households. The EU population growth has added to housing demand in recent years, with four consecutive years of population increases since 2021, driven mainly by migration as the natural change was overall negative. Population growth correlates positively with house price growth, as shown in Figure 31.

Figure 31: House prices vs population growth, 2007-2023, EU27



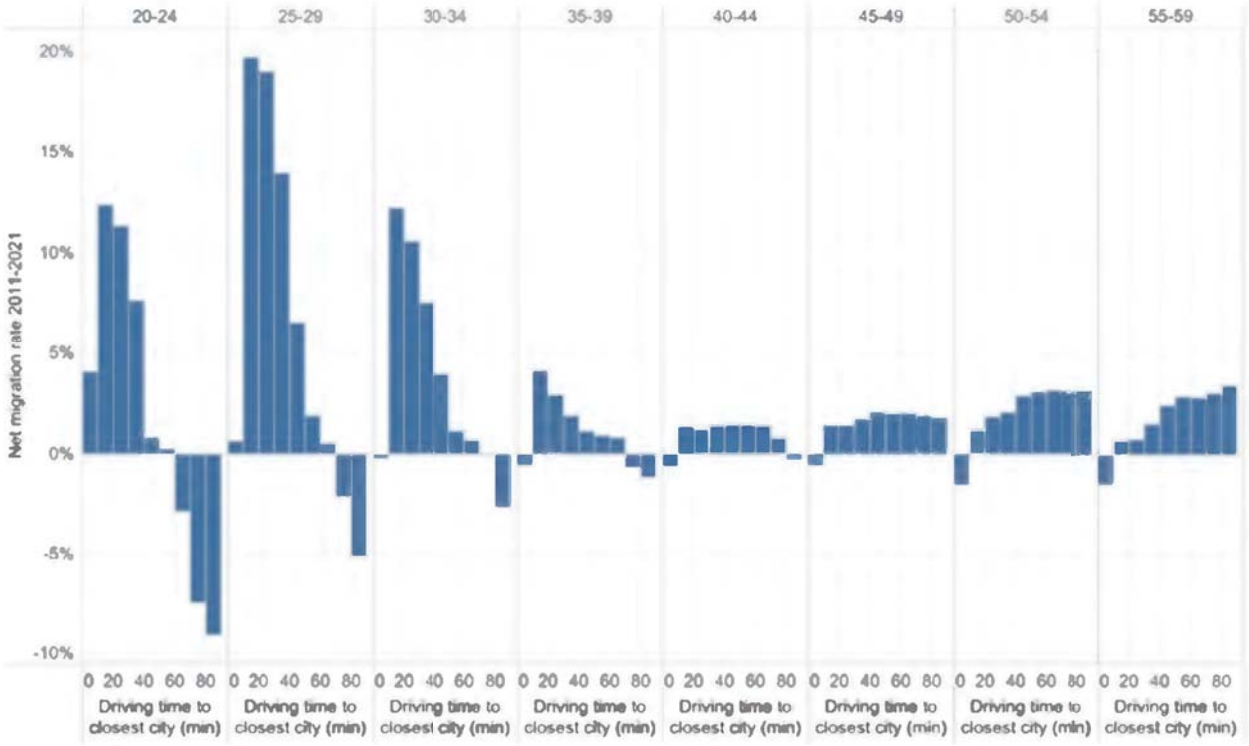
Source:. European Commission: DG Economic and Financial Affairs, 2025, based on Eurostat data.
Notes: The dashed line corresponds to the simple regression. Income refers to adjustable disposable income

([118]) Abreu, D., Félix, S., Oliveira, V. and Silva, F., *The impact of a macroprudential borrower-based measure on households' leverage and housing choices*, Banco de Portugal Working Papers, no 16, 2021, https://www.bportugal.pt/paper/impact-macroprudential-borrower-based-measure-households-leverage-and-housing-choiceshttps://www.bportugal.pt/sites/default/files/anexos/papers/wp202116_0.pdf; Hodula, M., Pfeifer, L., and Ngo, N., 'Easing of borrower-based measures: Evidence from Czech loan-level data', *Journal of Banking & Finance*, Volume 178, 2025, https://doi.org/10.1016/j.jbankfin.2025.107489.

Urbanisation – the shift of population from rural areas to towns and cities – is a key driver of housing demand in the EU. Urbanisation, the long-term movement of populations from rural areas to urban centres, continues to be driven by the search for better educational, employment and cultural opportunities offered by cities. The share of urban population rose from under 70% ([119]) in 1980 to 75% in 2024, and it is projected to reach 84% by 2050 ([120]). This demographic shift, apparent in most EU countries, led to surging demand for urban housing and a significant strain on existing urban infrastructures. Where housing supply responds slowly to rising demand, urban property prices and rents also increase, with affordability pressures often spilling into surrounding suburban areas (see Section 1.1). Young adults in EU MS aged 20 to 34 have the highest migration rates to urban areas, while middle-aged individuals are more likely to move to the outskirts of cities, driven by the need for larger homes to accommodate growing families. It led to stronger population growth and less ageing in areas within commuting distance from large cities (see Figure 32).

([119]) European Commission: Eurostat (GISCO), based on census population grid 2021 and local administrative units 2021, accessed 30/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Urban-rural_Europe_-_introduction#Area_and_population.
([120]) United Nations Department of Economic and Social Affairs, *World Population Prospects 2024 – Summary of Results*, 2024, https://doi.org/10.18356/9789211065138.

Figure 32: Net migration rates by age in relation to driving time to closest large city, 2011-2021, average across Local Administrative Units of selected EU MS



Source: European Commission: Joint Research Centre, 2025.

Changes in family structure have led to a decline in average household size and raised housing demand, notably through the growing share of single-person households. Traditional family models evolved to include an increase in single-person households, fuelling demand for smaller and more flexible living spaces. Across the EU, single adult households without children grew by 16.9% between 2015 and 2024 to reach 75 million, or more than 35% of all households. As of 2024, single households without children account for over 40% of all households in 10 EU Member States, increasing demand for smaller dwellings and studio/one-bed rentals in many urban markets ([121]). The reduction in average household sizes is leading to a divergence between overall population growth and household growth: between 2010 and 2024, the total number of households grew by 10.34% ([122], while the EU population grew by 1.96% in the same period ([123]).

([121]) European Commission: Eurostat, Households statitstics - Labour force surveys, 'Private households by household composition, number of children and age of youngest child', [lfst_hhnhtych], accessed 03/12/25.
([122]) European Commission: Eurostat, Households statistics - Labour force surveys, 'Private households by household composition, number of children and age of youngest child', [lfst_hhnhtych], accessed 03/12/25.
([123]) European Commission: Eurostat, 'Population on 1 January by age and sex', [demo_pjan], accessed 03/12/25.

The growing popularity of alternative living arrangements also presents a challenge to existing and new housing stock. The rising portion of shared living, often driven by the inaccessibility of affordable housing for young people moving out of their parents' homes, has increased demand for larger, adaptable housing units. The existing housing stock was not built to accommodate such living arrangements, and the new housing stock is not necessarily designed with shared living in mind.

Student mobility and the concentration of students in some university cities ("studentification") increase specific housing demand. While in some cities the number of students declined in recent years, in some university cities the growth in the number of students increases demand for both purpose-built student accommodation and private rentals, with documented impact on local rents and neighbourhood composition in several European cities ([124]). An influx of students can raise private rents near campuses, demonstrating an immediate demand-side effect in rental sub-markets if not met by dedicated supply. The financialisaton of housing (see the following sub-section) also extended to student housing across Europe, redirecting supply toward purpose-built student housing and mid-term rental platforms ([125]). Evidence from Italy highlights that shortcomings in subsidised university residences can push student demand into private rentals at higher cost, reinforcing local affordability pressures ([126]).

Population ageing is increasing demand for accessible, age-friendly housing and neighbourhoods across the EU. Increased life expectancy and the move away from multi-generational living has also resulted in large housing units being occupied by elderly homeowners and renters, instead of being shared between generations as in the past. In 2024, more than one-fifth (21.6%) of the EU population was estimated to be aged 65 years and over, up from 18.7% in 2014 ([127]), while the old-age dependency ratio rose to 33.9% in 2024. This points to a rising share of households that are dependent on accessible housing and proximity to social and health services to live independently, stay in their community and avoid institutionalisation. However, the shift

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([124]) Garmendia, M., Coronado, J. M., and Ureña, J. M., 'University Students Sharing Flats: When Studentification Becomes Vertical', *Urban Studies*, *49*(12), pp. 2651-2668, 2011, https://doi.org/10.1177/0042098011428176; Baron, M. and Kaplan, S.,; 'The impact of 'studentification' on the rental housing market', in: *50th Congress of the European Regional Science Association - Sustainable Regional Growth and Development in the Creative Knowledge Economy*, Jönköping, 2010, https://hdl.handle.net/10419/119078.

([125]) Revington, N. and Benhocine, C., *Financializing Through Crisis? Student Housing and Studentification During the Covid-19 Pandemic and Beyond,* 2023, https://doi.org/10.1111/tesg.12549.

([126]) Laudisa, F., 'Universities as Urban Anchors: Examining the Socio-Economic Impact and Support Dynamics in Italy', in: *Universities and Cities in Transition. Policies and Projects for a Better Integration*, volume 1, no1, https://doi.org/10.6092/issn.3034-8544/18768.

([127]) European Commission: Eurostat, 'Statistics Explained', Population structure and ageing, European Commission website, accessed 30/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing.

away from multi-generational living led to large housing units being under-occupied, instead of being shared between generations as in the past ([128]). According to the OECD, the current housing stock is ill-adapted to the specific needs of an ageing society ([129]), leaving older people unable to keep living in their homes and maintain their well-being when their functional ability decreases ([130]).

Taxation and other government policies influence both housing transactions and prices. Taxes on housing influence both the number of transactions and prices ([131]) and can also reduce residential and labour mobility ([132]). Well-designed recurrent property taxes are less distortive for capital allocation than other types of taxes ([133]) and better suited to reduce demand-side distortions than other taxes ([134]) and relaxing these can lead to higher prices through increased demand ([135]). Owner-occupied housing is usually favourably taxed compared to other investment types, notably financial investment. This tax bias can be expected to contribute to an increase in housing demand, particularly from the side of higher-income households without credit constraints, who may then

([128]) European Commission, *The impact of demographic change in a changing environment*, 2023, Publications Office of the European Union, Luxembourg, https://commission.europa.eu/system/files/2023-01/Demography_report_2022_0.pdf.

([129]) OECD, *Housing and Inclusive Growth,* OECD Publishing, Paris, 2020, https://doi.org/10.1787/6ef36f4b-en.

([130]) Such adaptation measures are step-free access, lifts, accessible bathrooms and homes in neighbourhoods with health, transport and social services within easy reach. See: World Health Organisation – Regional Office for Europe and European Commission, *Age-friendly environments in Europe: Indicators, monitoring and assessments,* 2018, https://www.who.int/europe/publications/i/item/WHO-EURO-2018-1088-40834-55192.

([131]) Best, M. and Kleven, H., 'Housing Market Responses to Transaction Taxes: Evidence From Notches and Stimulus in the U.K.', in: *Review of Economic Studies Ltd*, vol. 85(1), pp. 157-193, https://www.jstor.org/stable/26543884.

([132]). European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, pp. 69-70, https://op.europa.eu/s/Aa3S.

([133]) European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, p. 70, https://op.europa.eu/s/Aa3S.

([134]) OECD, *Housing Taxation in OECD Countries,* OECD Tax Policy Studies, No. 29, OECD Publishing, Paris, 2022, https://doi.org/10.1787/03dfe007-en.

([135]) For an overview of the economic principles for taxing immovable property and in particular land see: European Commission: Directorate-General for Economic and Financial Affairs, Leodolter, A, Princen, S. and Rutkowski, A., *Immovable Property Taxation for Sustainable and Inclusive Growth*, European Economy Discussion Papers, No 156, January 2022, Publications Office of the European Union, Luxembourg, 2022, https://data.europa.eu/doi/10.2765/431531.

crowd out credit-constrained households with lower incomes ([136]). Reduced VAT rates ([137]) for new-build housing are used with the intention to lower final prices and improve affordability. In practice, lowering VAT rates is not the most efficient measure to improve affordability due to a low passthrough effect – especially when housing supply is constrained, and land prices are high. Nevertheless, the majority of Member States already apply a reduced VAT rate to renovation of dwellings or housing built as part of their social and decarbonisation policies. Taxing vacant dwellings, through comprehensively applied recurrent property taxes and potentially also additional charges, can help in moderating speculative housing demand and returning these properties to the housing market ([138]).

Direct government housing subsidies and benefits tend to increase housing prices through boosting demand without a corresponding increase in supply. Direct government schemes, such as first-time-buyer subsidies, shared-equity and loan programmes, mortgage guarantees or down-payment relief, relax borrowing constraints for eligible households, therefore lifting demand and often boosting house prices in areas where supply constraints are binding and if not accompanied by sustained supply-side measures ([139]).

5.2. Financialisation and speculation, golden visas and residence schemes

Part of the housing stock is owned by institutional investors, attracted by the expectation of reliable returns. Institutional investors, including insurance companies, pension funds, credit institutions, private equity firms and non-financial corporations, have become increasingly active in residential real estate markets, either directly or through listed and non-listed real estate investment funds some of which are also accessible to retail investors. This growing participation, often referred to as the 'financialisation', reflects the expanding role of financial market actors in housing investment, seeking portfolio diversification and potentially stable long-term returns ([140]). Overall, data shows that institutional investments in the residential real estate sector have tripled

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([136]) European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, p. 72, https://op.europa.eu/s/Aa3S.
([137]) Under Annex III of the VAT Directive.
([138]) Evidence from France shows that the 1999 Vacant Housing Tax (*Taxe sur les logements vacant)* reduced vacancy rates and shifted previously empty units into primary residence. See: Segú, M., 'The impact of taxing vacancy on housing markets: Evidence from France', in: *Journal of Public Economics*, Volume 185, May 2020, https://doi.org/10.1016/j.jpubeco.2019.104079.
([139]) Carozzi, F., Hilber, C. and Yu, X., 'On the economic impacts of mortgage credit expansion policies: Evidence from help to buy', in: *Journal of Urban Economics,* Volume 139, January 2024, https://doi.org/10.1016/j.jue.2023.103611.
([140]) Gabor, D. and Kohl, S., *My home is an asset class - The financialization of housing in Europe*, 2022, https://hdl.handle.net/21.11116/0000-0009-E232-F.

over 2012-2020 with effects on housing demand ([141]). Insurance companies are notably invested in residential real estate in countries such as Germany, France, the Netherlands, and Belgium, while pension funds have significant residential property holdings in Sweden, Germany, Portugal, and the Netherlands, mainly in highly concentrated metropolitan and touristic areas ([142]). Corporate ownership can lead to professionalised property management, but it can loosen the link between local prices and fundamentals.

Financialisation might have contributed to the deviation of house prices and rents from economic fundamentals. Driven by a search for yield in a low-interest rate environment and benefiting at the same time of low funding costs, institutional investors increased their presence in major European cities in the past decade. They might have contributed to the deviation of the house price-to-income ratios from long-term trends (see Section 1.1), weakening the link between local housing markets and the underlying economic and demographic fundamentals. While empirical evidence in France, Ireland, Spain, Belgium, Greece and Bulgaria ([143]) suggests an increase in house prices, it is difficult to establish the direction of causality, i.e. if prices increase because of these investments or if these investments flow into these markets due to the expectation of house price increases ([144]).

EU reliable data on housing speculation are limited. Speculation, or "buy-to-flip," refers to short-term resale for profit, sometimes leaving properties vacant or underused [(145)]. While such behaviour is observed in European housing markets [(146)], EU-wide data on buyer motives, holding periods, and vacancy remain scarce [(147)]. Macro-level signals, including rising prices and high

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([141]) Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, ECB Working Paper Series, No 3026, 2025, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3026~8b2199688d.en.pdf.

([142]) Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, ECB Working Paper Series, No 3026, 2025, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3026~8b2199688d.en.pdf.

([143]) Banti, C. and Phylaktis, K., 'Are institutional investors the culprit of rising global house prices?' *Real Estate Economics*, Vol. 53, Issue 2, 2025, pp. 210-256, https://doi.org/10.1111/1540-6229.12514.

([144]) Lima, V., Hearne, R. and Murphy, M., 'Housing financialisaton and the creation of homelessness in Ireland', *Housing Studies*, Vol. 38, Issue 9, pp. 1695–1718, https://doi.org/10.1080/02673037.2022.2042493.

[(145)] Leung, C. K. Y., and Tse, C.-Y., 'Flipping in the housing market', *Journal of Economic Dynamics & Control*, vol. 76, pp. 232–263, March 2017, https://doi.org/10.1016/j.jedc.2017.01.003.

[(146)] Fernandez-Perez, A., Gómez-Puig, M., and Sosvilla-Rivero, S., *El Clasico of Housing: Bubbles in Madrid and Barcelona's Real Estate Markets*, Institut de Recerca en Economia Aplicada Regional i Pública (IREA) Working Papers, Vol. IR25/07, https://hdl.handle.net/2445/221004.

([147]) In Paris, 9.2% of the total housing stock was considered vacant and 1.3% durably vacant (more than 2 years). While this is more acute in the most affluent districts, this does not presume of the motivations of the owners, see: Atelier Parisien d'Urbanisme (APUR), *Les logements innocupés à Paris – Etat des*

turnover, suggest that short-term speculation is plausible [148], but actual "flip rates" remain unmeasured.

These same conditions — high turnover, opaque ownership, and concentrated investor activity — can also create vulnerabilities for money laundering, as criminal networks may exploit real estate transactions through rapid resales, overvaluation, or shell companies [149]. Money laundering may distort residential real estate prices locally, though not systematically. Recent estimates indicate that around $750 billion in illicit funds flowed through Europe's financial system in 2023 ([150]).

Residency-by-investment or "golden visa" programmes channel additional demand into property markets, lifting prices. Some Member States sell residency or visas conditional on investment in real estate. These investments artificially fuel housing demand and drive prices. Even if these are often concentrated at the higher end of the property market, if entering an already tight market, they would impact the entire range ([151]). Several Member States already terminated these schemes ([152]) or tightened conditions ([153]).

5.3. Short-term rentals

Between 2018 and 2024, short-term accommodation rentals (STR) booked via major online platforms increased by more than 90% in the EU, concentrated in urban areas and touristic areas. In 2024, 854 million guest nights were booked through the four biggest STR platforms ([154]),

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lieux, mise en perspective historique et leviers pour l'action publique, 2023, https://www.apur.org/sites/default/files/logements_inoccupes_paris.pdf?openfile_analytics=5279.

[148] Dröes, M. I., and Francke, M. K., 'What causes the positive price–turnover correlation in European housing markets?', *Journal of Real Estate Finance and Economics*, vol. 57, pp. 618–646, March 2017, https://doi.org/10.1007/s11146-017-9602-7.

[149] Europol, *Decoding the EU's most threatening criminal networks*, Publications Office of the European Union, 2024, https://data.europa.eu/doi/10.2813/811566.

[150] Nasdaq Verafin,'Financial Crime Insights: Europe: Special edition of the 2024 Global Financial Crime Report', Nasdaq Verafin website, accessed 08/12/25, https://verafin.com/financial-crime-insights-europe/.

([151]) IZA Institute of Labour Economics, Pereira dos Santos, J. and Strohmaier, K., *All That Glitters? Golden visas and real estate*, IZA DP No 16857, March 2024, https://www.iza.org/publications/dp/16857/all-that-glitters-golden-visas-and-real-estate.

([152]) Example: Spain, see KPMG, 'Spain – Golden Visa Cancelled', KPMG website, 9 January 2025, accessed 30/10/25, https://kpmg.com/xx/en/our-insights/gms-flash-alert/flash-alert-2025-008.html; referring to Organic Law 1/2025, of January 2, on measures regarding the efficiency of the Public Justice Servicen https://www.boe.es/diario_boe/txt.php?id=BOE-A-2025-76.

([153]) U.S. Department of State, '2024 Investment Climate Statements: Greece', U.S. Department of State website, accessed 08/12/25, https://www.state.gov/reports/2024-investment-climate-statements/greece.

([154]) Airbnb, Booking, TripAdvisor, and Expedia.

a 93% increase compared to pre-COVID in 2018 ([155]). The growth rate in guest nights booked via online collaborative platforms is related to: i) entirely new STR listings emerging after 2018, ii) STR listings existing prior to 2018 but which became available for booking via online platforms in 2018 and after, and iii) an increase in the occupancy rate of both pre-existing and new STR listings. Traditional accommodation (comprising hotels and similar accommodation and camping) comprises 2.7 times more tourist nights-spent than STRs booked via online platforms in 2024. STR amount approximately to one quarter of tourist accommodation in the EU ([156]). STR supply is often concentrated in highly touristic cities and regions, including EU's coastal regions, but overall less prevalent in Eastern and Northern EU countries (see Figure32). France, Poland, Sweden and Romania experienced over 90% growth in STR demand, while in the Netherlands, Estonia, Czechia and Ireland growth was below 20%. STR demand is concentrated in urban and intermediate regions ([157]), which account for 80% of all STR guest nights, even though STR growth was stronger in rural regions (86%) compared to urban regions (53%). Growth rates alone do not provide the full picture of concentration of STR in certain housing markets.

The share of STR listings compared to the overall housing stock is particularly high in some historical city centres and tourist areas ([158]). STR listings are overall estimated to represent around 1.2% in relation to the total number of dwellings. However, this proportion is highly variable per country and even within regions and urban areas, with as much as 20% of the dwelling

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([155]) European Commission: Eurostat, 'New records set by online booking platforms in 2024', European Commission website, 02/04/25, accessed 13/11/25, https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20250402-1#:~:text=In%202024%2C%20guests%20spent%20854.1%20million%20nights%20in,%28719.0%20million%20nights%29%2C%20setting%20a%20new%20record%20high; European Commission: Eurostat, 'Short-stay accommodation offered via collaborative economy platforms by months and residence of the guest - experimental statistics', [tour_ce_omr], 2024, accessed 08/12/25.

([156]) European Commission: Eurostat, 'Nights spent at tourist accommodation establishments', [tour_occ_ninat], 2024, acccessed 08/12/25.

([157]) European Commission: Joint Research Centre, Batista e Silva F et al., *Place-based determinants of housing prices in Europe*, JRC Science for Policy Brief, 2025; European Commission: Joint Research Centre, Tucci, M., Pigaiani, C., Freire, S, Batista, F., *JRC-census dwelling grid 2021*., doi: 10.2905/50cfa4c6-406e-47ce-a092-64a2c5d18303; European Parliament: Policy Department for Transport, Employment and Social Affairs
Directorate-General for Cohesion, Agriculture and Social Policies (CASP), Claire Colomb, *In-depth Analysis requested by the HOUS Special Committee* – The regulatory aspects of short-term rentals in the EU, PE 759.356 – September 2025, pp. 11–12, 2025, https://www.europarl.europa.eu/RegData/etudes/IDAN/2025/759356/CASP_IDA(2025)759356_EN.pdf.

([158]) Urban and intermediate regions form part of the urban-rural typology, they are NUTS level 3 regions where more than 50 % and up to 80 % of the population live in urban clusters.urban clusters. See: European Commission: Eurostat, 'Statistics Explained', Territorial typologies manual – urban-rural typology, European Commission website, accessed 30/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_urban-rural_typology; Cócola Gant A., ' Holiday Rentals: The New Gentrification Battlefront', *Sociological Research Online,* Volume 21, Issue 3, SAGE Publications, August 2016, https://journals.sagepub.com/doi/epub/10.5153/sro.4071.

stock linked to STRs in specific touristic hotspots and some areas of some EU cities, but diminishing rapidly towards the periphery of cities and to less than 1% in most of the respective commuting areas. ([159]).

The rapid growth of STR and its concentration in some areas demonstrates its success, but has also sparked concerns. STRs offer greater choice, the possibility to holiday in areas with less tourism infrastructure, extra income for hosts and an incentive for private investment in renovation. But its rapid growth since COVID-19 has also sparked concerns about lower security and safety standards vis a vis the hotel sector, noise, gentrification of neighbourhoods and displacement of local residents and – increasingly – an unbalanced spread of tourism aggravating the housing crisis, especially in densely populated and highly popular destinations. Over the past years, a number of cities, regions and Member States have implemented restrictive measures regarding STRs ranging from complete bans to a restriction of multiple listings per host, night caps or taxation measures.

A high concentration of STR does not automatically translate in housing shortages and higher prices but can be an aggravating factor. While the shortage of affordable housing is mainly attributed to other structural factors such as constrained supply (see Section 6, increases in STR activity have been associated with higher rents and house prices in Milan, Rome and Paris ([160]). However, more research would be required to better understand the correlation. For instance, some areas with high demand for tourism face limited demand for long-term residence, while at the same time seasonal workers in tourism-heavy regions create significant additional housing demand. Very likely there is a two-way causality. While the growth of STR contributes to increase in demand for housing and prices, new STR locations are in highly valued areas due to their

([159]) European Commission: Joint Research Centre, Batista e Silva F et al.,*Place-based determinants of housing prices in Europe*, JRC Science for Policy Brief, 2025; United Nations Economic Commission for Europe (UNECE), Taltavull de La Paz, P. and Juárez Tárraga, F., *Sharing Economy and its Effects on Housing Markets*, United Nations Publication, New York, 2025, https://unece.org/info/Housing-and-Land-Management/pub/371516; Cócola Gant A., ' Holiday Rentals: The New Gentrification Battlefront', in: *Sociological Research Online,* Volume 21, Issue 3, SAGE Publications, 2016, https://journals.sagepub.com/doi/epub/10.5153/sro.4071.

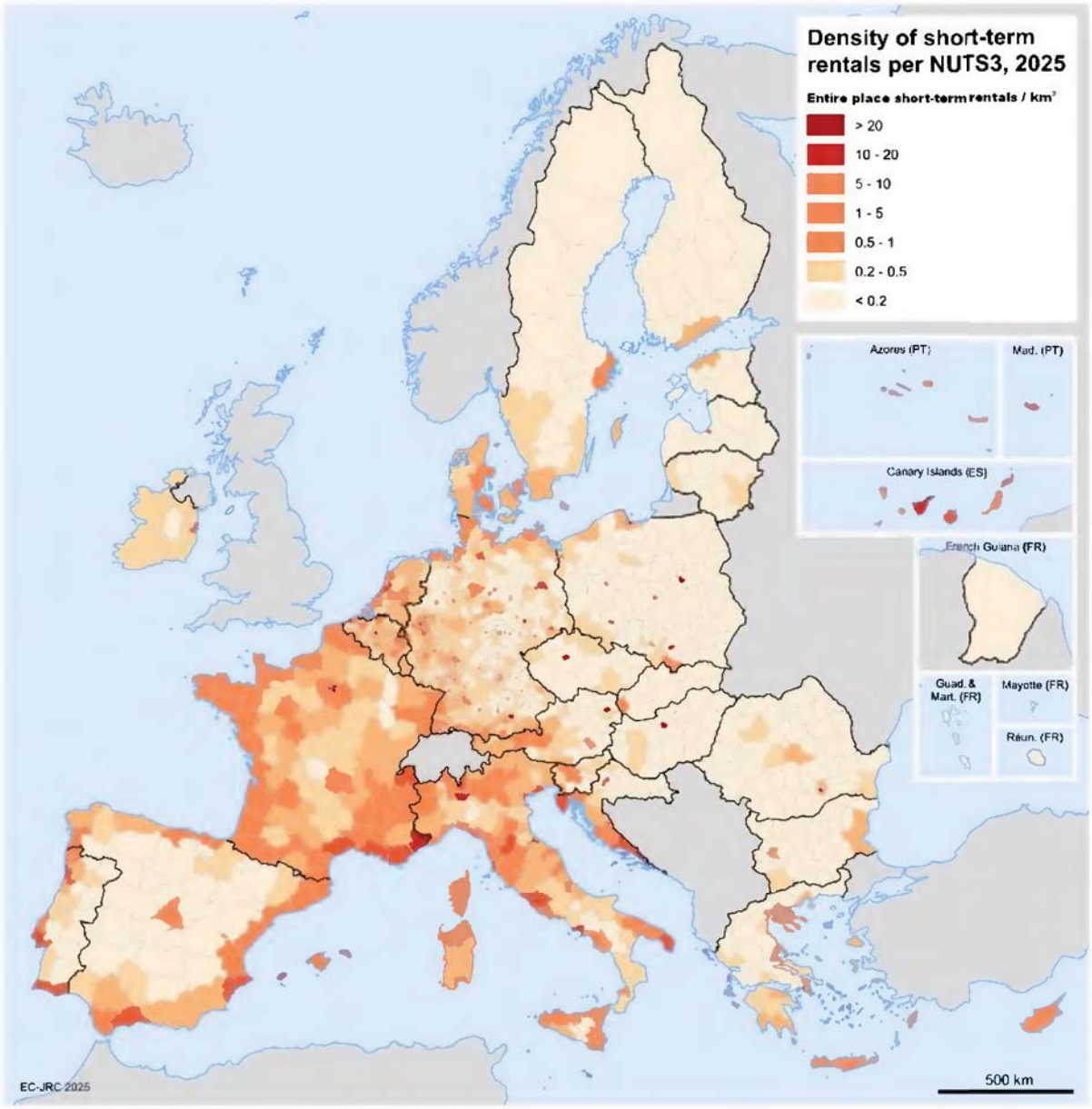
([160]) European Commission: Joint Research Centre, Iodice, S., Van Heerden, S., Barranco, R., Bertoni, E., Curtale, R. et al. *Exploring the nexus of housing, tourism, and local liveability: Insights from Paris, Milan, and Rome*, Iodice, S., Van Heerden, S. and Ribeiro barranco, R. (eds), Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/8602103; Garcia-López, M.- À., Jofre-Monseny, J., Martínez-Mazza, R. and Segú, M., 'Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona', in: *Journal of Urban Economics*, Volume 119, September 2020, https://doi.org/10.1016/j.jue.2020.103278; European Commission: Joint Research Centre, Batista e Silva, F., Barranco, R., *UDP - Tourism intensity, PID*, 2022, http://data.europa.eu/89h/7b8460b8-fc34-4f2b-bd1a-32223d6862c9 ; Reichle, P., Fidrmuc, J., and Reck, F., 'The sharing economy and housing markets in selected European cities', *Journal of Housing Economics*, Volume 60, June 2023, https://doi.org/10.1016/j.jhe.2023.101914.

attractiveness ([161]). Based on an analysis of 25 EU Member States (excluding Greece and Estonia due to data limitations) the correlation is stronger for sale prices than for rental prices ([162]). A likely explanation is the geographical distribution of STR, which appears much concentrated in city centres and seasonal touristic areas, where demand for long-term rental is relatively low, but sales prices are higher due to high tourist attractiveness.

([161]) European Commission: Joint Research Centre, Batista e Silva F et al., *Place-based determinants of housing prices in Europe*, JRC Science for Policy Brief, 2025

([162]) Analysis carried by the Joint Research Centre in collaboration with the Technical University of Vienna and University of Bologna, to be published in a forthcoming scientific publication. Results are also reported in: European Commission: Joint Research Centre, Batista e Silva F et al., *Place-based determinants of housing prices in Europe*, JRC Science for Policy Brief, 2025.

Figure 33: Number of entire place short-term rental per square kilometre, per NUTS3 regions in the EU27, 2025



Source: European Commission: Joint Research Centre, 2025a, based on AirDNA data.

While a significant number of hosts rent out their primary or secondary residence to support their living, short term rentals as a commercial activity is on the rise. STRs were originally conceived ([163]) to provide additional income to hosts, and indeed STR of primary residences does

([163]) Airbnb and Martin Trust - Centre for MIT entrepreneurship, Stern, S., Cook, D. and Delgado, M.: *AirBNB and digital discrimination,* 2019,

not remove dwellings from the long-term housing market ([164]). However, there is a growing tendency towards commercialisation and professionalisation, with investors buying up and then letting multiple properties ([165]). The very large majority (87%) of the hosts are 'peers', i.e. private non- professionals ([166]), and only 13% are to be seen as 'professional hosts' ([167]). However, professional hosts account for more than 45% of the STR offers ([168]) and earn 50% of the total revenue on average ([169]). In 2019, prior to recent restrictions (notably the introduction of night caps in some cities, which disincentive renting on a professional basis), an average of 23% of hosts managed between two and five, and 3% more than five properties in Europe ([170]). The share of commercial hosts was even higher in popular touristic areas. In Barcelona, 31% of all STR-listed dwellings were managed by >5-property hosts, i.e. in a commercial manner ([171]).

The new Regulation on short term rentals applicable from May 2026 will generate data that will help determine the number of transactions per host and location and the type of accommodation. The Regulation on STRs ([172]) will introduce a registration obligation for hosts, who receive a unique registration number. Platforms will have to randomly check whether hosts register and display the correct numbers, and public authorities will be able to suspend registration numbers and ask platforms to delist non-compliant hosts. Platforms will be required to share data with national 'single digital entry points', once per month in an automated way, about the identity of the host, location of the property and duration of the rental. The Regulation will therefore improve access to, and the quality of, data for public authorities on the provision of STR, bring more transparency and help public authorities to regulate the market in a proportionate and evidence-based way.

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https://static1.squarespace.com/static/55c4e9aae4b05eaf17ef79ff/t/5dda9347455f406d50c6e0dc/1574605640891/Airbnb_EStrategyCase.pdf.

([164]) Judgment of 22 September 2020 in joint cases C 724/18 and C-727/18, *Cali Apartments*, ECLI:EU:C:2020:743, paragraph 72.

([165]) European Commission, Commission Staff Working Document Impact Assessment report - SWD (2022) 350 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52022SC0350.

([166]) Offering maximum two listings, according to the definition used in the Impact assessment report - SWD (2022) 350 final, p.4.

([167]) European Commission, see previous footnote.

([168]) European Commission, see previous footnote.

([169]) Based on Airbnb, See Impact Assessment report - SWD (2022) 350 final, p.174.

([170]) United Nations Economic Commission for Europe (UNECE), Taltavull de La Paz, P. and Juárez Tárraga, F., *Sharing Economy and its Effects on Housing Markets*, United Nations Publication, New York, 2025, https://unece.org/info/Housing-and-Land-Management/pub/371516.

([171]) United Nations Economic Commission for Europe (UNECE), Taltavull de La Paz, P. and Juárez Tárraga, F., *Sharing Economy and its Effects on Housing Markets*, United Nations Publication, New York, 2025, p. 26, fig.III.2E, https://unece.org/info/Housing-and-Land-Management/pub/371516.

([172]) Regulation (EU) 2024/1028 of the European Parliament and of the Council of 11 April 2024 on data collection and sharing relating to short-term accommodation rental services and amending Regulation (EU) 2018/1724, OJ L, 2024/1028, 29.4.2024

6. SUPPLY SIDE CONSTRAINTS

Despite rising demand, housing supply has failed to keep up with demand, leading to increasingly severe housing shortages in growing cities and regions. Construction of new homes is at historically low levels (see Section 6.3). Renovation of vacant housing units and repurposing of existing buildings (public, commercial or industrial) for residential use is insufficient. Increased demand has translated into higher prices rather than increased supply. Since both housing demand and supply are relatively inelastic in the short and medium term, market adjustments typically primarily occur through prices rather than quantities, leading to disproportionately strong price increases in response to demand shifts. Several factors limit the supply of residential properties across the EU. These factors include policies and regulations (such as land use regulations, zoning laws, building permits and other administrative procedures, property taxes, incentives for existing homeowners to perpetuate housing shortages), high costs of energy and building materials, and a shortage of qualified labour and skilled workers in construction. Public infrastructure and their accessibility, involving transportation, utilities, and other essential services, affect both the supply and attractiveness of housing in particular areas. Finally, long-lasting insufficient investment in social and affordable as well as accessible housing, provided by public entities or non-profit organisations, is also a key component. In addition, steady private investment in housing supply can complement public and non-profit provision and contribute to affordability over time.

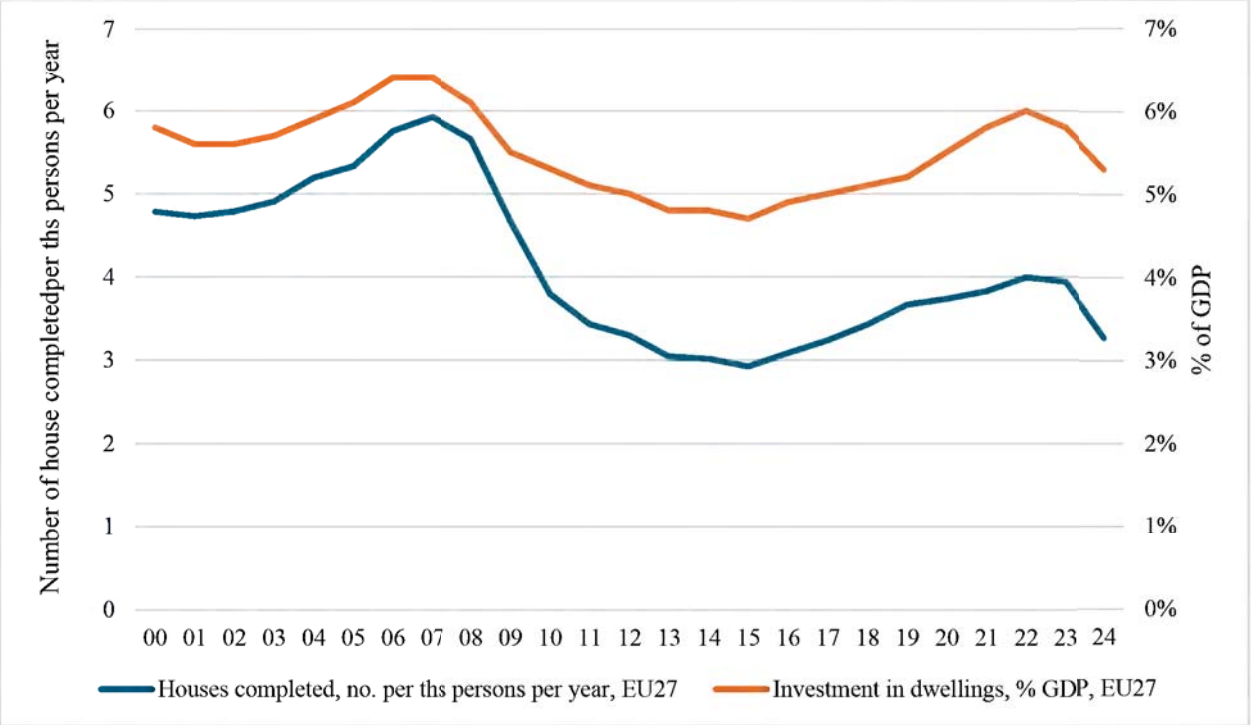
6.1. Housing investment trends

While investment in housing construction and renovation has declined between 2022 and 2024, building permits as an early indicator for upcoming construction projects fell even more strongly. While public and private housing investment in the EU in 2022 nearly reached the levels prior to the housing and economic crisis, between 2022 and 2024 it fell again reflecting increasing construction and financing costs. In 2024, in the EU 5.3% of GDP was invested in housing, ranging from 2.2% in Poland and 2.6% in Greece to 6.8% in Italy and 8.0% in Cyprus (see Section 2.1.1). Moreover, there has been an increasing gap between housing investment in new construction and renovations, reflecting the increasing share of renovations as well as increasing cost of housing construction (**Error! Reference source not found.**). Building permits have declined significantly in recent years and are close to historical lows, indicating that new housing supply will remain constrained in the near future (see Section 6.3).

Across the EU, housing investment is primarily undertaken by households. The amounts that households devote to purchasing or renovating a dwelling (total investment by households and

non-profit institutions, including not only but mainly residential investment) ([173]) gradually increased to 7% of GDP up to 2007. After the global financial and economic crisis, this rate fell below 5% and increased again after the pandemic to 6% in 2022. Due to the increased interest rates in 2022, the payment capacity of households has been severely constrained and in 2023, housing investment declined, reflecting higher construction and financing costs (see Section 3). The household sector is thus the principal private investor behind new supply and improvements.

Figure 34: Investment in dwellings and houses completed, EU27



***Source**:* European Commission: DG Economic and Financial Affairs, 2025, own calculations based on Eurostat and ECB data.

Institutional investors are increasing their presence in housing markets since 2013. Residential real estate is seen as increasingly important asset for financial and other institutional investors. Despite the growing presence of such investors, neither Eurostat nor the ECB publish

([173]) According to the Eurostat methodology, household investment mainly consists of the purchase and renovation of dwellings. Macroeconomic data of housing investments only by sector (government, households, corporates) is not published.

official figures of such investments. However, available data ([174]) shows a sustained rise in volumes in the amounts of residential real estate purchases by institutional investors ([175]) in the euro area from 2013 onwards. The European Residential Investment Survey by Knight Frank found that institutional investment into residential buildings reached EUR 50 billion in Q1-Q3 2021, covering student housing, multifamily and single-family rental, co-living and senior housing ([176]) (see Section 5.2 on financialisation). For 2023, the EIB reported that institutional investment ([177]) in residential buildings amounted to EUR 43 billion, around 0.24% of GDP ([178]).

Public expenditure and public investment related to housing development are very limited. The general government expenditure related to housing development remained broadly stable at around 0.2% of GDP for many years and has increased in the recent years reaching 0.7% of GDP in 2024 (EUR 199 billion). This increase was mainly driven by Italy's significant investment grants to households provided as tax credits for housing energy renovation (see also Section 2.3), which did not increase the stock of new housing. In turn, the actual public investment in residential buildings, which represents genuine investment into new social or affordable housing, remained around 0.04% of GDP (EUR 7 billion in 2023) ([179]). However, it is worth noting that various social housing providers do not form part of the government sector (see Section 2.2.5).

Various EU programmes support housing affordability, quality, sustainability, and inclusivity. The EU supports social, affordable and sustainable housing with a number of EU programmes to boost financing in this area, totalling more than EUR 43 billion of mobilized investments over 2021–2027. In 2024, the European Commission compiled a toolkit on social

([174]) Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, ECB Working Paper Series, No 3026, 2025, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3026~8b2199688d.en.pdf; European Money and Finance Forum (SUERF), Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, SUERF Policy brief, No. 1155, April 2025, https://suerf.org/wp-content/uploads/2025/04/SUERF-Policy-Brief-1155_Bandoni_DeNora_Giuzio_Ryan_Storz.pdf.

([175]) In this context: investment funds, insurance companies; pension funds and non-financial corporations.

([176]) Knight Franck, European Residential Investment Survey 2022, 2021, https://www.knightfrank.ie/research/european-residential-investment-survey#:~:text=European%20Residential%20Investment%20Survey%202022%20is%20out%20now.,trends%20across%20age-targeted%20institutional%20rental%20accommodation%20across%20Europe.

([177]) In this context: Insurance companies, pension funds, credit institutions, private equity firms and non-financial corporations

([178]) Bandoni, E., De Nora, G., Giuzio, M., Ryan, E. and Storz, M., *Institutional investors and house prices*, ECB Working Paper Series, No 3026, 2025, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp3026~8b2199688d.en.pdf.

([179]) European Commission: Eurostat, 'General government expenditure by function (COFOG)', [gov_10a_exp], accessed 28/11/2025.

housing ([180]) showcasing the use of EU funds for social and affordable housing and associated services.

The Recovery and Resilience Facility accounts for the largest single fund dedicated directly to affordability and availability, with EUR 19.6 billion for housing measures across 20 Member States ([181]), of which about EUR 6.3 billion are grants and EUR 13.3 billion are loans ([182]). Within the measures addressing housing affordability and availability, EUR 13.5 billion are contributing to energy efficiency objectives, among which housing. In addition, the RRF supports reforms that complement investments to increase access to decent and affordable housing. Those include among others, legislative changes to accelerate permitting and improve procedures, setting up affordable and social housing schemes and rules including financing instruments, and regulatory changes in taxation to address distortions in the housing market. Moreover, the Technical Support Instrument (TSI) has contributed to the capacity building of national authorities to design and implement a broad spectrum of housing support measures, including tailored housing solutions for channelling investments into affordable housing.

Cohesion policy - through the European Regional Development Fund (ERDF), the Cohesion Fund and the Just Transition Fund and Interreg – has planned EUR 7.5 billion for energy efficiency of housing stock and social housing for vulnerable groups over the 2021-2027 programming period. Together with the national allocations, the total planned support to housing was EUR 10.4 billion. The mid-term review Regulation (EU) 2025/1914 of Cohesion policy gives flexibility to Member States and regions to allocate funding also to affordable housing on top of the EUR 7.5 billion already planned and provides financial incentives to Member States and regions who propose by end 2025 to reprogramme funds towards housing. Furthermore, the European Social Fund + (ESF+) also finances a number of activities for a total of EUR 4.4 billion. It includes upskilling of service providers working with homeless people, counsels to tackle indebtedness, and support for housing retention schemes. It also supports operations fighting against homelessness, including measures related to food and material support, access to care and healthcare services, counselling and community activities. Finally, in addition to support under shared management, the European Urban Initiative directly supports urban municipalities in

([180]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, *Social housing and beyond – Operational toolkit on the use of EU funds for investments in social housing and associated services*, Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2767/924036.

([181]) European Commission, 'Recovery and Resilience Scoreboard – Thematic Analysis – Housing', European Commission website, 27/05/25, accessed 31/10/25, https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/assets/thematic_analysis/scoreboard_thematic_analysis_housing.pdf.

([182]) European Commission, 'Recovery and Resilience Scoreboard – Thematic Analysis – Housing', European Commission website, 27/05/25, accessed 31/10/25, https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/assets/thematic_analysis/scoreboard_thematic_analysis_housing.pdf.

creating innovative solutions to address urban challenges to be tested in real urban settings (including housing-related ones), for a total of EUR 395 million ERDF. Additionally, the EU fosters public and private investment in social, affordable and sustainable housing with the InvestEU Fund through an EU budget guarantee (around EUR 7 billion mobilized by 2025) and provides local project development support via the InvestEU Advisory Hub. Other important funding streams such as LIFE (EUR 138 million with potential further funds by 2027, depending on projects selected), Horizon Europe (EUR 540 million with potential further funds by 2027, depending on projects selected) and the Single market programme (EUR 2.2 million) support housing-related market uptake, capacity building and research and innovation activities. For instance, the New European Bauhaus Facility 2025-2027 ([183]) fosters the development and scaling up of innovative solutions for the transformation of neighbourhoods to become not only sustainable, but also inclusive, accessible and beautiful. The available New European Bauhaus tools are intended to help plan, design and conduct projects following the NEB values and working principles.

Looking ahead, the Social Climate Fund is set to provide support to vulnerable households from 2026 to 2032. The fund specifically addresses impacts of the Emissions Trading System covering buildings (and road transport) - ETS2. Investments will support vulnerable households and households in energy poverty in coping with the possible price increases emerging from ETS2. In their Social Climate Plans, Member States can support investments in building renovations, promote the access to affordable housing, including social housing and contribute to the decarbonisation of heating, cooling and cooking systems, as well as by integrating renewable energy generation and storage, including through renewable energy communities, citizen energy communities and other active customers to promote the uptake of the self-consumption of renewable energy.

Promotional banks at national and regional levels, along with the European Investment Bank (EIB), play a key role in providing long-term financing for social, sustainable and affordable housing. In 2023, the national and regional promotional banks (NPBIs) committed financing of approximately EUR 50 bn, or 0.29% GDP ([184]). Over 2020-2024, the EIB provided EUR 15.6 billion and aims to increase funding up to EUR 4.3 billion in 2025 ([185]).

([183]) New European Bauhaus, ' The New European Bauhaus Facility', New European Bauhaus website, accessed 31/10/2025, https://new-european-bauhaus.europa.eu/funding/new-european-bauhaus-facility_en.

([184]) European Long-Term Investors Association (ELTI) / European Association of Public Banks (EAPB), 'The contribution of National Promotional Banks and Institutions in Europe: Addressing the Housing Crisis', European Long-Term Investors Association website, 2025, accessed 10/12/25, https://www.flipsnack.com/eltia/elti-brochure-9-housing/full-view.html.

([185]) European Investment Bank, Lefort Siemplenski, J., 'Why is there a housing crisis and how do we fix it?', *EIB Essays*, 2025, https://www.eib.org/en/essays/housing-crisis-solutions-europe.

The European Commission calculates that housing supply in the EU will need to grow strongly to keep pace with demand from increasing household numbers ([186]). The EU housing stock increased from 218 million dwelling in 2010 to ca 248 million by end-2024, but in one third of the EU regions ([187]), construction did not manage to keep up with expanding demographic demand. Commission projections suggest that household numbers will further increase in those areas. To bridge the supply-demand gap over the next decade, the Commission estimates that Europe will need to add about 650,000 dwellings per year to the 1.6 million currently built. Delivering those extra housing units would cost about EUR 150 billion annually (roughly 1% of EU GDP) in public and private investments ([188]). Part of the additional supply could also result from the conversion, repurpose or reuse of existing buildings.

Box 6.1: Housing investment needs

Growing pressures in Europe's housing markets - reflected in rising affordability concerns and persistent signs of undersupply - have increased the need to quantify the scale of investment required to address the shortfall.

A novel ECFIN-JRC approach estimates the number of additional dwellings that will be required to meet current and projected demand across the EU until 2035 - beyond those already expected to be built - and quantifies the corresponding investment needed to deliver them (see ([189])). These needs are valued using regional secondary-market apartment prices as a proxy for construction costs. The ECFIN-JRC estimate consists of four components:

(1) accumulated shortfalls from insufficient construction in 2010–2024 in regions that remain undersupplied,

(2) dwelling needs arising from projected demographic change over 2025–2035,

(3) replacement and amortisation needs over the same period, and

(4) expected construction in these regions over 2025-2035, which is subtracted from the total need.

As a result,

$Total\ Housing\ Needs_{2035} = (1)+(2)+(3)$

([186]) European Commission: Joint Research Centre, Balouktsi et al., *Housing investment needs in the EU*, JRC Ispra, JRC 144703, https://publications.jrc.ec.europa.eu/repository/handle/JRC144703.

([187]) This refers to NUTS3 level regions, small regions with a population ranging from 150,000 to 800,000 inhabitants.

([188]) Current construction trends suggest ca 18 million homes need to be supplied by 2035, partly to replace the existing aging housing stock. The latest calculations suggest that more than 7 million homes would be required in addition by 2035. This figure is based only on current demographic trends and replacement needs.

([189]) European Commission: Joint Research Centre, Balouktsi et al., *Housing investment needs in the EU*, JRC Ispra, JRC 144703, https://publications.jrc.ec.europa.eu/repository/handle/JRC144703.

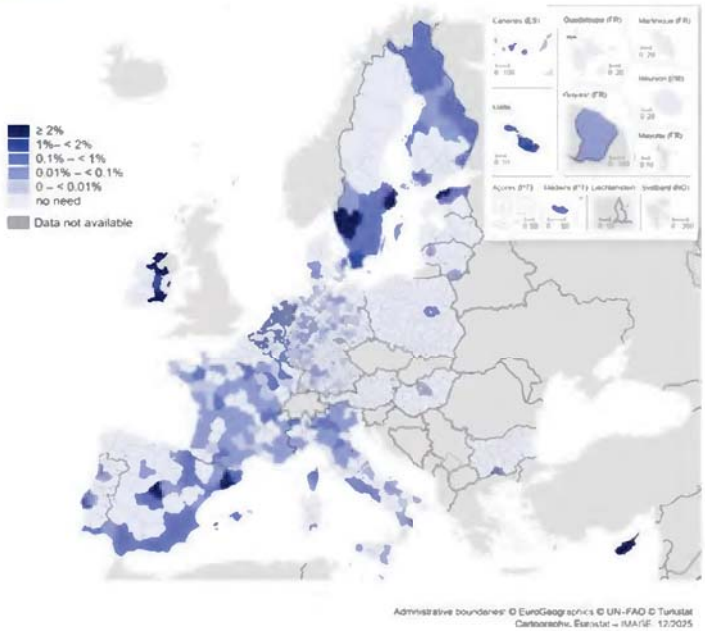
Housing Construction Gap$_{2035}$ = (1)+(2)+(3)−(4)

To address the localized nature of housing needs, these calculations are based on a bottom-up approach, combining detailed NUTS3 regional data from both the supply and demand sides of the housing market. Only regions with a shortage contribute to the EU total; oversupplied regions are set to zero.

On the demand side, the calculations incorporate demographic projections, including both the number and composition of households. The underlying data are drawn from regional historical population statistics (JRC ARDECO), regional population projections (Eurostat), and household composition information from the 2011 and 2021 censuses. On the supply side, the analysis incorporates the existing stock of dwellings, current price levels, and expected changes in the stock. The results draw primarily on the ECFIN-JRC mapadomo dataset, which provides the timeseries information used to derive depreciation rates. Additional country-level data on housing completions and starts from ECFIN's Housing Market Database, together with the 2011 and 2021 census data, inform the construction rates applied in the model. Because the full dwelling stock is never entirely available as primary residences —due to renovation periods, transition between uses, secondary homes, and vacancies— increases in supply must account for this underutilisation. The calculation therefore assumes that the occupancy ratio (the share of occupied dwellings in the total stock) remains constant at 2020 level as new units are added. Together, these inputs provide the first granular and comprehensive estimates of future housing needs and the additional required investment, spanning the entire EU.[1] Figure 1 shows the localized nature of investment needs varying considerably between Member States and regions. Capital regions and metropolitan areas showcase the highest needs reflecting diverse demographic and market conditions compared to rural areas. According to the calculations, the estimated housing need in the EU up to 2035 is substantial, amounting to 7.14 million dwellings additional to current construction trends. Meeting this requirement implies a significant investment effort of €1.68 trillion by 2035, equivalent to roughly €150 billion per year in 2024 prices ([190]). These estimates do not take into account needs arising from housing inadequacy or renovation needs; these factors would increase the estimates substantially.

([190]) Habitat & Territoires Conseil, 'Quels besoins en logements sociaux à l'horizon 2040?', L'Union Sociale pour l'Habitat website, 03/10/25, accessed 08/12/25, https://www.union-habitat.org/sites/default/files/communiques/documents/2023-09/etude_htc_pour_ush_besoins_en_logements_octobre_2023.pdf.

Figure 1: Total investment need up to 2035 at NUTS3 level (as share of national dwelling stock)



Source: European Commission: Joint Research Centre, 2025 own calculations based on ECFIN-JRC mapadomo

Comparison to other estimates

Few other estimates of housing investment needs for the European Union exist.

For example, estimates for France by Habitat & Territories Conseil suggest a need of 518,000 homes per year. A breakdown shows that yearly demand due to demographic pressures is 97,000 per year compared to 134,000 based on our estimation. In addition, their final estimates consider investment needs due to inadequate housing, renovations as well as secondary and holiday houses ([191]).

Other national estimates summarized by Housing Europe indicate additional housing needs in Germany to be 400,000 homes per year while 1 million homes are needed in the Netherlands by 2031 and 500,000 new homes should be constructed in Sweden by 2033 ([192]).

The EIB's EU estimates indicate a need of 2.25 million additional housing units in 2025, leaving a gap of 925,000 units. Their estimates for annual additional housing demand are based on household formation and combine different national data sources. Similarly, the approach mainly estimates the needs due to the demographic pressures. Also, their analysis can be considered conservative as it does not account for pent-up demand built up in previous years, nor does it integrate internal migration changes due to changes in housing supply, and it does not consider demand of second homes by residents and non-residents and the ageing of the

([191]) See previous footnote.

([192]) Housing Europe, *State of Housing in Europe 2025 – Trends in a nutshell*, 2025, https://www.housingeurope.eu/state-of-housing-in-europe-2025-trends-in-a-nutshell/.

housing stock. However, for three major countries (DE, FR, IT), EIB adjusts initial calculations upwards to align government targets, despite acknowledging the lack of transparency in setting these targets in the national policy ([193]).

Notes:
[1] Estimates will be updated as future ECFIN-JRC mapadomo releases will become available.
[2] Prices are held constant at 2024 levels, therefore, the potential impact of additional construction activities on prices are not taken into account.

Housing demand varies considerably between Member States and regions, reflecting diverse demographic and market conditions. Metropolitan areas in particular experience strong growth in the number of households, partly due to smaller average household sizes in cities. In contrast, many rural regions face lower demand resulting even in an oversupply of housing. At the same time, around 20% of the total dwelling stock in the EU is "non-primary" (it consists of vacant, seasonal or secondary homes), though often those properties are not located where most needed ([194]).

Additional supply needs to focus mainly on the densification of use of land or of existing properties in urban areas. Current and future housing needs are concentrated in a limited number of regions, home to a quarter of the EU's population. These regions are already densely populated, and face scarcity of available land. Increasing the number of dwellings in these places requires the expansion of residential space together with better use of existing buildings (see Section 6.5). This implies a focus on urban densification, particularly through the conversion of underused or non-residential land in these areas. To this end, the activation of brownfield sites is key, as it enables housing to be provided in central locations while minimising environmental and construction costs. Easing regulatory restrictions can also foster densification, e.g. by relaxing restrictions on suburban building heights, or minimum parking space requirements.

Box 6.2: Supply elasticities

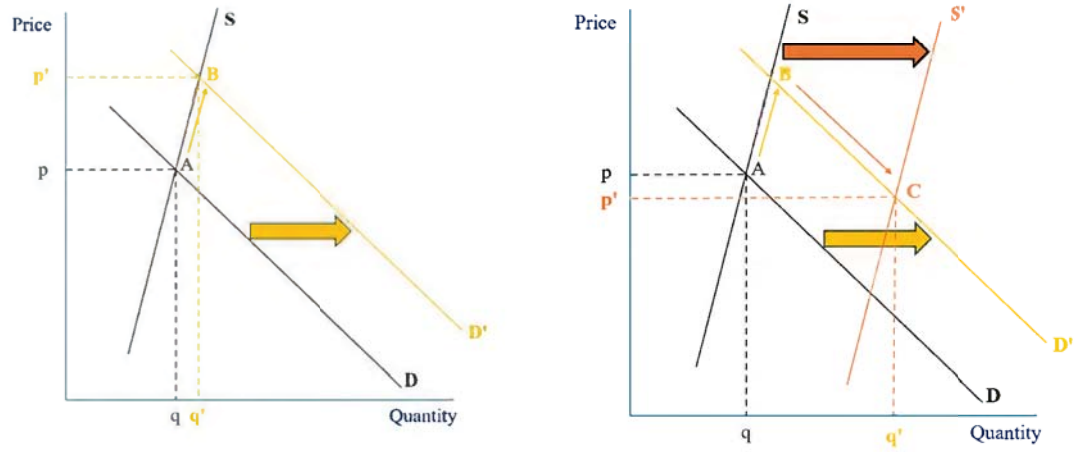
([193]) European Investment Bank (EIB), Stemmer, M. and van der Wielen, W. (lead authors), 'Chapter 4: Social inclusion as a path to well-being and competitiveness', in: EIB, *EIB investment report 2024/25,* EIB Economics Department, Luxembourg, 2025, https://www.eib.org/en/publications/20240354-investment-report-2024.
([194]) Current definitions of non-primary (also labelled as unoccupied) dwellings include vacant or unused dwellings, as well as those used as seasonal or secondary residence.

Supply-side elasticity in housing measures the responsiveness of construction to changes in house prices or rents. The supply elasticity compares the quantity of housing units supplied – whether measured as construction starts, permits, floor area or changes in housing stock – to changes in house prices or rents. Formally, the supply elasticity ε is defined as the percentage change in housing quantity supplied Q divided by the percentage change in price P. An elasticity of 1 implies a one-for-one adjustment (or "unity") of prices and housing units. In turn, a low elasticity (e.g. 0.1–0.3) means supply barely rises when prices climb.

$$\varepsilon = \frac{\%\Delta Q}{\%\Delta P}$$

The responsiveness of supply to house price increases, e.g. through new demand stimulated by policy measures or by rising population or incomes, is key to determine the policy mix. If the construction sector has free capacities in a flexible regulatory environment, then additional housing demand mainly results in construction rather than increasing prices. However, if supply is constrained by limited construction land, strict regulations or lack of capacity in the construction sector, policy measures that lead to an increase in demand will not result in significant new supply but higher housing and land prices, further weighing on purchase affordability. In a typical price-quantity market diagram, the supply elasticity can be visualised as the steepness of the supply curve. If supply is steep and demand increases, it is price *p* rather than quantity *q* that will increase (left graph). In turn, if policy measures would rather stimulate housing construction (for example, by releasing land for construction), shifting the supply curve to the right, prices fall while quantity increases (right graph).

Graphs 1 & 2: Impact of a positive demand shock on price and quantity with inelastic supply

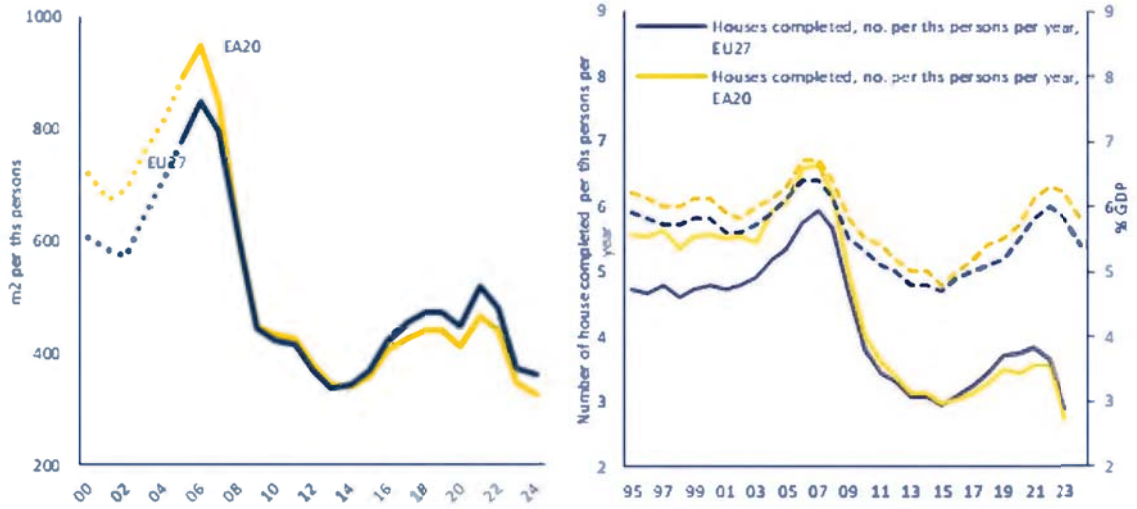


Source: European Commission: DG Energy, 2025.

Estimating the supply elasticity for the EU is hampered by the delay in the supply reaction and regional variations. Regularly, housing supply is proxied by the number of permits issued

(short-term) or the number of actual, completed dwellings (long-term).[195] The number of building permits issued, instead of actual completed dwellings, is sometimes preferred because of the permit-to-build lag. In addition to this time lag, there are important differences between Member States, regions and cities. In addition, it is key to distinguish price changes due to supply changes (e.g. driven by changes in input costs or regulations) and price changes driven by demand, which makes it hazardous to estimate the supply elasticity. Finally, while simple estimations assume housing to be a homogenous good, a detailed analysis would need to distinguish between different types of apartments and houses.

Graphs 3 & 4: Building permits (left) and newly completed dwellings (right) in the EU, 2000-2024



Source: European Commission: DG Economic and Financial Affairs, 2025, own calculations.

However, it is measured, housing supply elasticities seem to be low in Europe, reflecting both land scarcity, sectoral problems and a strict regulatory environment. An OECD study from 2011 ([196]) found that housing supply is relatively flexible in North America and Nordic countries (above unity), but rigid in continental Europe (e.g. Netherlands 0.19, Austria 0.23 and Italy 0.26). Recent evidence ([197]) also finds that the responsiveness of housing supply has declined in Europe, due to declining productivity in the construction sector (dominated by small

([195]) Complementary flow measures like house sales by dwelling type exist only for a subset of Member States since 2022 and are provided on a voluntary basis, while broader cross-country sources such as the OECD Affordable Housing Database explicitly flag comparability issues.
([196]) OECD, 'The Price Responsiveness of Housing Supply on OECD Countries', *OECD Economics Department Working Papers*, No. 837, 2011, OECD Publishing, Paris, https://doi.org/10.1787/5kgk9qhrnn33-en.
([197]) Bank for International Settlements, Banerjee, R., Gorea D., Igan D. and Pinter G. (2024): *Monetary policy and housing markets: insights using a novel measure of housing supply elasticity*, *BIS Quarterly Review*, December 2024, 2024, https://www.bis.org/publ/qtrpdf/r_qt2412c.htm.

companies), limited available land and local land-policy restrictions, constraints on building in metropolitan and coastal areas and historical monument protections prevalent in most European cities. Thus, metropolitan areas with limited possibilities for new developments have low elasticities of 0.2–0.4, compared to 0.8–1.2 in less densely developed and less regulated areas. This has led to an increased spatial dispersion in land and house prices between growth poles and other regions.

Policymakers can contribute to increase the elasticity of housing supply by easing administrative restrictions and providing support for private investment. As discussed in the previous sections, economic policy can facilitate the growth of housing supply, for example by spurring investment in new construction technologies and skills to overcome low productivity growth in the construction sector. Policymakers can also aim at reducing regulatory constraints such as land use controls, zoning restrictions or permit delays. These impose financial costs and delay or limit the construction industry's response to increasing demand. Policy makers can also help limit the impact of geographic restrictions via regional policy and improving transport links to surrounding regions.

6.2. Construction

6.2.1. Costs and productivity gaps

Construction is one of the largest industries in the EU and a major contributor to economic growth and job creation in Europe. The full construction value chain contains a range of economic activities related to building and infrastructure projects, construction product manufacturers, engineering and architectural services, and various other activities such as rental and leasing of machinery and equipment, and employment agencies. It covers the entire lifecycle of buildings and infrastructure, including design, construction, maintenance, refurbishment, and demolition. Additionally, it includes specialised activities, facility management, cleaning, landscaping, and various related services, as well as the production of construction-related machinery, legal, consulting, scientific services, waste, and utilities. Unless otherwise specified, this SWD refers more narrowly to the construction *sector* as a subset of the industry, which focuses on construction and renovation activities ([198]).

The construction sector ([199]) is a key industry, contributing substantially to employment and economic activity. The broader construction sector including related services directly employs

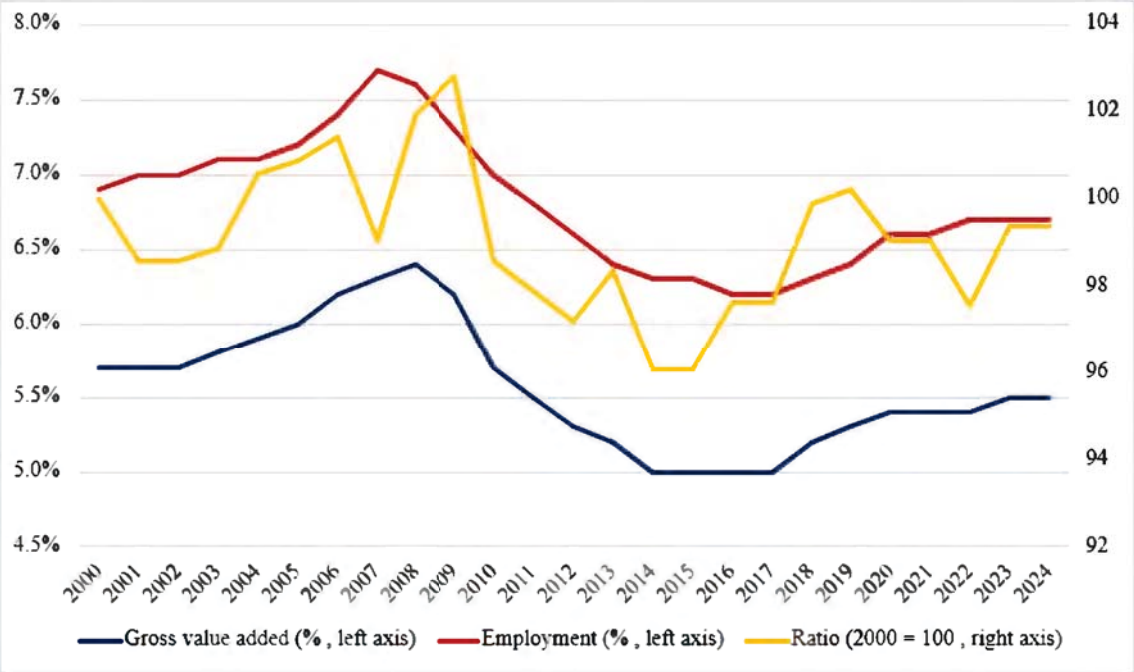
([198]) Based on EU NACE classification to categorise economic activities for statistical purposes.
([199]) Eurostat defines the construction sector (NACE Section F) as including construction of buildings (residential and non-residential), civil engineering (infrastructure like roads and utility projects), and specialised construction activities (such as plumbing, electrical, and carpentry services).

over 18 million people (6.7% of total employment ([200]) for EU-27 in 2025-Q2) and the wider construction ecosystem employs around 25 million workers ([201]). In 2022, the construction of residential and non-residential buildings employed around 3.1 million people, representing 89.5% of the construction of buildings sector, generating 80.8% of the sector's value added (€143.8 billion) ([202]). The construction sector also contributed 5.6% of total Gross Value Added (GVA) in 2024 of the EU; approximately EUR 882 billion. Since 2000 the share of construction's GVA has fluctuated between 5 (in 2017) and 6.4% (in 2008). In 2024, this figure was in the middle of this range (see Figure 35).

The European construction sector is predominantly composed of small enterprises with low technological integration, which is often associated with low and declining productivity and innovation capacity. Despite its economic importance, the construction sector faces several challenges that hinder productivity and growth. The sector is characterised by small and micro enterprises with limited technological innovation and high intensity of labour relative to capital, and by a limited effort in formal research activities compared to other industries. This is often associated with low productivity, and with a limited capacity for innovation, both in terms of products and processes. Experience outside the EU is similar. However, since 2019, productivity in the construction sector has further declined by 8% (see Figure 36). This seems to be result of a confluence of pandemic□related disruptions, labour shortages, material□supply constraints, reduced investment, and a slow uptake of digital technologies. Another perspective attributes low productivity to the high and heterogeneous regulation of housing construction in Europe, including diverse and numerous planning and building rules, diverse permitting procedures often at municipal level, different standards and norms in European regions, as well as legal uncertainties (see also Section 6.3).

([200]) European Commission: Eurostat, 'Employment by main industry (NACE Rev.2) - national accounts' (namq_10_a10_e), accessed 28/10/2025.
([201]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'Construction ecosystem and LSP(s) – Pact for Skills in Construction (Skills partnership for Construction)', Pact for Skills website, accessed 04/12/25, https://pact-for-skills.ec.europa.eu/about/industrial-ecosystems-and-partnerships/construction_en.
([202]) European Commission: Eurostat, 'Statistics Explained - Business in the construction of buildings sector', European Commission website, accessed 28/10/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Businesses_in_the_construction_of_buildings_sector#:~:text=average%20(11.3%25).-,Sectoral%20analysis,in%202022%20%E2%80%94%20see%20Figure%201.

Figure 35: Share of construction in employment and GVA (%) as well as labour productivity compared with total economy, EU27

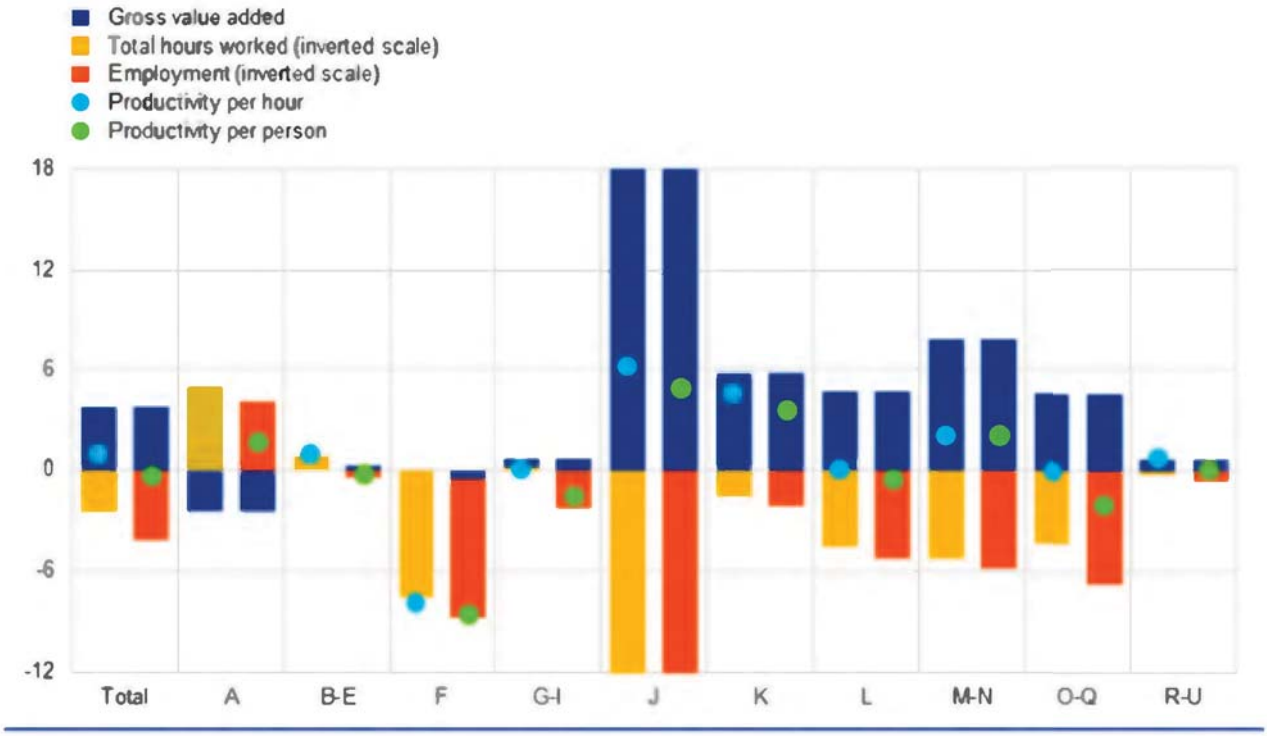


Source: Eurostat, (nama_10_a10 & nama_10_a10_e), accessed 15/10/2025.
Notes: Labour productivity compared with total economy (ratio 2000=100): Share of the construction sector GVA in total GVA divided by the share in total employment * 100.

The construction sector is experiencing a slowdown in productivity. The construction sector is characterised by small and micro enterprises with limited technological integration, high intensity of labour relative to capital and a limited effort in formal research activities compared to other industries. This has led to low productivity and a limited capacity for innovation, both in terms of products and processes. According to Eurostat, between 2019 and 2024, the construction sector experienced a decline in productivity, with a reduction of 8.5% per hour and 9.1% per person. This performance ranks construction as the poorest among all macroeconomic sectors, as illustrated in Figure 36. Several factors have contributed to this slowdown in productivity growth, including the impact of the COVID-19 pandemic, labour shortages, material□supply constraints including disruptions in global supply chains, rising energy prices since 2021, and the exacerbating effects of the war in Ukraine as well as reduced investment, and a slow uptake of digital technologies ([203]).

([203]) António Dias da Silva, A., Fabrizio, A. and Mohr, M., 'Recent country-specific and sectoral developments in labour productivity in the euro area', *ECB Economic Bulletin*, Issue 5, 2024, https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202405_02~d69d7cac99.en.html.

Figure 36: Labour productivity growth by sector (cumulative percentage changes Q4 2019-Q1 2024, EU27)



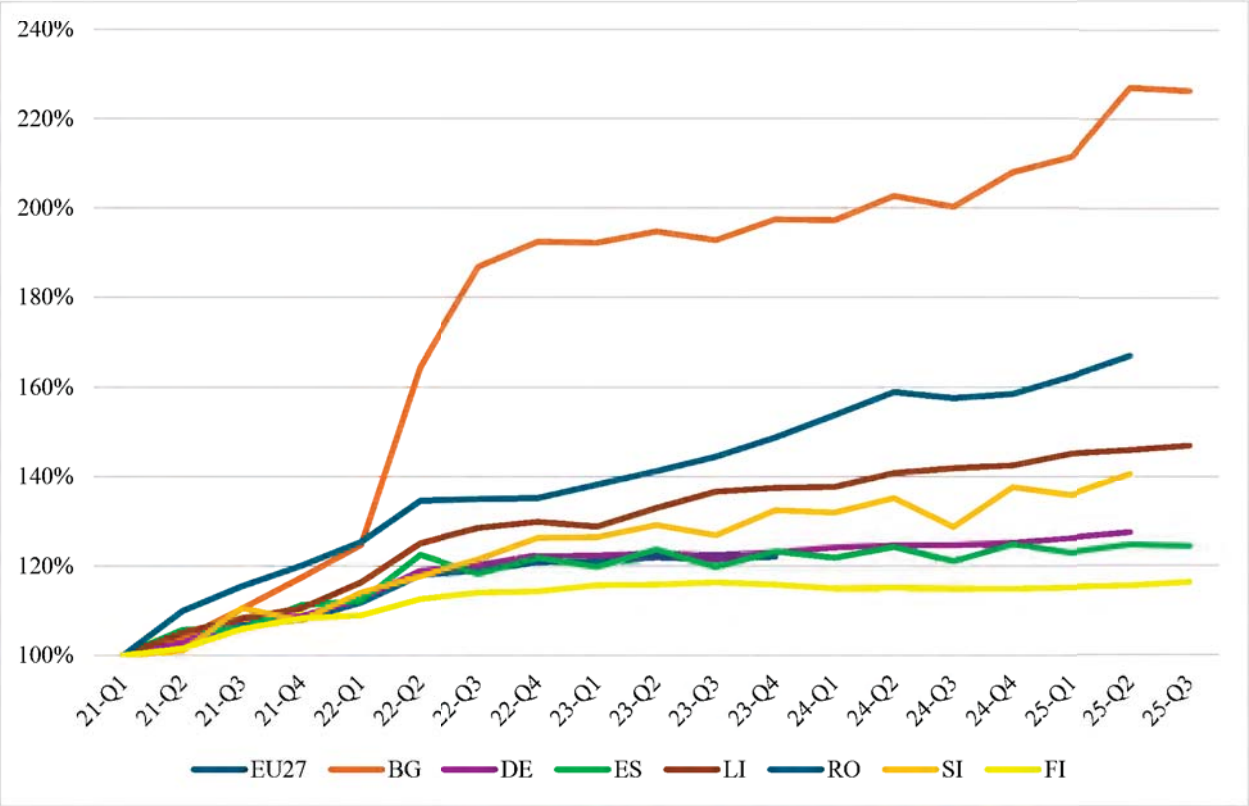
***Source*:** ECB, 2024, own calculations based on Eurostat data.
Notes: The NACE Rev. 2 codes on the x-axis refer to the following economics sectors: Total: Total economy; A: Agriculture, forestry and fishing; B-E: Industry; F: Construction; G-I: Trade, transportation and accommodation, J: Information and communication; K: Financial and Insurance activities; L: Real estate activities; O-Q: Public service activities; R-U: Arts, entertainment, recreation and other service activities. Data for the Information and communication sector (J) are off scale. The actual values are 23.1% for gross value added, 15.8% for total hours worked and 17.3% for employment.

The productivity of the construction sector has a direct impact on the housing market. The level of availability, affordability and quality of housing as well as the reactiveness of the market to demand pressure are affected by the entire value chain from input material, building activity until waste management. The development and industrial application of innovation, digitalisation, and availability of skilled labour (professional training, skills, recognition of professional qualifications and cross-border provision of services) are key for housing supply.

Construction costs for new residential buildings have grown significantly, with differences among Member States. Between the end of 2020 and the end of 2024, for new residential

buildings producer prices rose by 22.7% in the EU ([204]). This was followed by a relative stabilisation, with a further slight increase of an additional 4% by 2025Q2. However, this overall trend varies among Member States. In Italy, for example, producer prices for new residential buildings rose more gradually, accumulating a total increase of 10% over the past five years. In contrast, Germany and Spain have witnessed above-average price escalations since 2020, with increases of 44% and 42%, respectively. These disparities illustrate the diverse economic pressures and market conditions influencing construction costs across different EU countries.

Figure 37: Construction producer prices of new residential buildings in EU27 selected countries (2021-Q1=100)



Source: Eurostat (sts_copi_q), accessed 03/11/25.

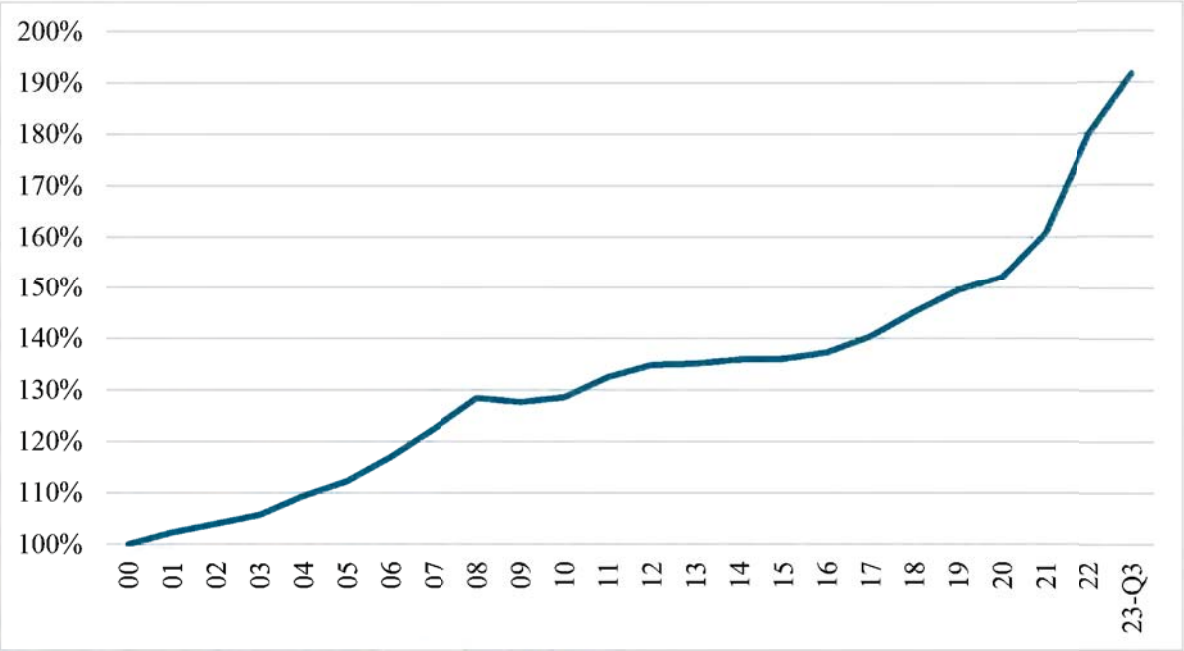
6.2.2. Input materials

The increase in construction costs has been driven by a hike in prices for construction inputs**.** Since the beginning of 2021, the price of most building materials, which typically accounts for 30 to 40% of the total cost of building a home (i.e. excluding the cost of land and necessary

([204]) European Commission: Eurostat: 'Construction producer prices or costs, new residential buildings - annual data' (sts_copi_a), 2024, accessed 31/10/2025.

infrastructure), has risen sharply in the EU, and caused higher building costs for housing (see Figure 38).

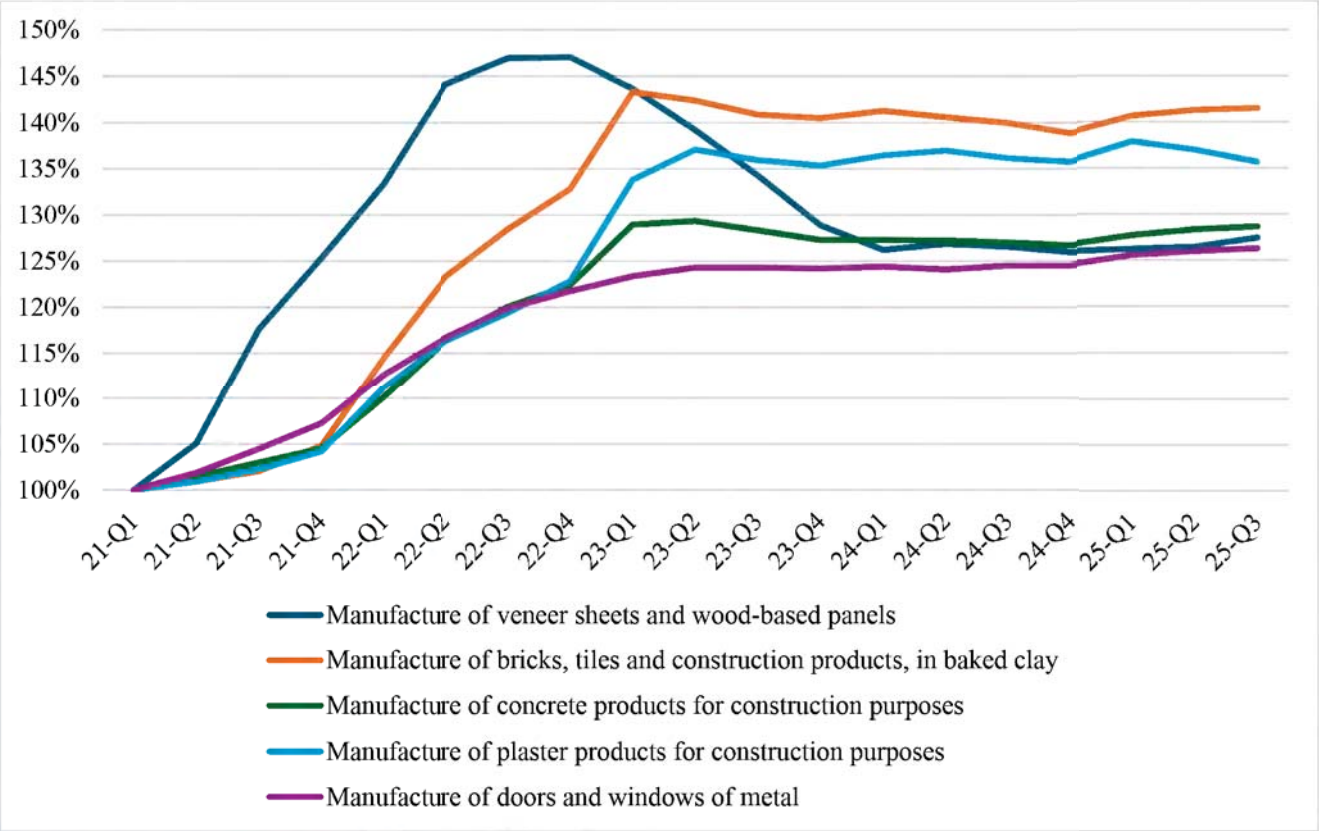
Figure 38: Construction producer prices for new residential buildings (2000=100), EU27



Source: Eurostat (sts_copi_q), accessed 31/10/2025.

The sharp increase in the price of construction products has been driven by supply chain disruptions and high energy costs. The onset of this price increase coincided with the pandemic, with further acceleration amid the Russian invasion of Ukraine. After this sharp increase, which continued until the end of 2023, costs have stabilised or, in some cases, fallen slightly. Nevertheless, producer prices for several key building products are still well above their 2021 levels, including increases of 25% for metal windows and doors, 26% for concrete products, 35% for veneer sheets, 36% for plaster products, and 41% for ceramic bricks and tiles (see Figure 39). The greatest impact in the cost increase of three major construction products (concrete, cement, bricks and tiles) is linked to the energy crisis.

Figure 39: Producer price index for selected construction products (2021-Q1=100), EU27



Source: Eurostat (sts_inppd_q), accessed 03/11/2025.

The construction sector has less import dependencies than other sectors, but strategic dependencies occur at the level of raw materials ([205]). There are few construction products with a high net import concentration. The main strategic dependencies for construction materials from non-EU sources are at the level of raw materials (magnesia for clay products, molybdenum and nickel for steel, fluorspar for aluminium and feldspar for glass). The move towards digitally powered smart and energy-efficient buildings also creates a dependence on electronic components such as semiconductors required in the production of solar panels (inverters), home automation and automatic window screens. Timber used in housing construction is a special case.

6.2.3. Shortages of skilled labour

Labour shortages in the construction sector have become increasingly acute since the COVID-19 pandemic, with shortages now three times higher than they were a decade ago

([205]) European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *Commission SWD - Annual Single Market Report 2023: Single Market at 30,* Publications Office of the European Union, Luxembourg, 2023, https://op.europa.eu/s/Aaln.

([206]). Severe and widespread labour shortages in the EU are reported for concrete placers and finishers, carpenters and joiners, insulation workers, plumbers and pipe fitters, air conditioning and refrigeration mechanics, painters and related workers, electricians and electronics mechanics and servicers, welders, metal and machinery workers, as well as heavy truck and lorry drivers. In addition to the higher demand for skilled trades, labour shortages are also driven by the ageing of the workforce, gender imbalances ([207]) and an overall limited attractiveness of these occupations for younger people.

Technological innovation, industrialised construction and the need for greater energy efficiency require new skillsets in the construction sector ([208]). According to Cedefop, between 2022 and 2035 an estimated 4.2 million job openings in the construction sector will need to be filled ([209]). This will include attracting new skilled workers. Digital technologies such as Building Information Modelling (BIM), 3D printing, or cloud computing require suitable qualification. Off-site manufacturing implies a shift from working on site to working in factories with new qualifications, as well as a need for technical skills such as computer aided design or computer aided manufacturing. The push for more energy efficiency, waste management and reduction of pollutants in construction processes further drives the demand for specific skillsets of construction workers. The European Construction Industry Federation (FIEC), the European Federation of Building and Woodworkers (EFBWW) and Construction of SMEs Europe (EBC), estimated that a comprehensive upskilling and reskilling effort for 25% of the construction industry workforce, amounting to 3 million workers, is necessary between 2022 and 2027 ([210]). Between 486,600 and 1,549,000 additional workforce positions will be required in the building construction and energy renovation sector from 2023 to 2030.

Limited mobility of construction professionals in the EU might aggravate difficulties in accessing qualified professionals. While 11% of EU mobile workers and 34% of the mobile self-

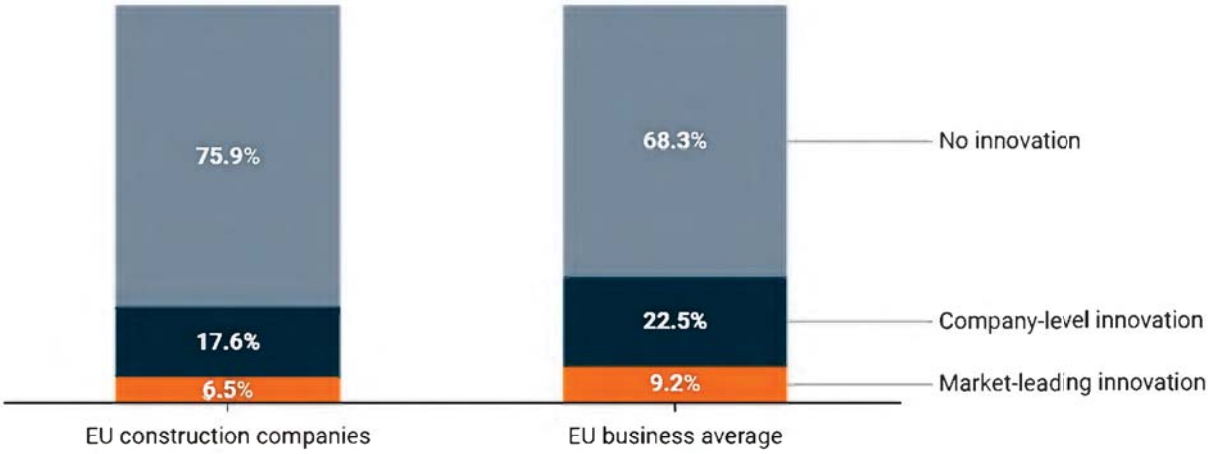
([206]) European Labour Authority, Fischer-Barnicol, M., Lechtenfeld, R., Prasad, N., Șuta, C.-M. et al., *EURES Report of shortage and surplus occupations 2024*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2883/9158114.
([207]) In 2021, just 2% of construction workers were women, see: European Centre for the Development of Vocational Training (CEDEFOP), 'Construction workers: skills opportunities and challenges (2023 update)', CEDEFOP website, 19/12/23, accessed 03.11/2025, https://www.cedefop.europa.eu/en/data-insights/construction-workers-skills-opportunities-and-challenges-2023-update#_summary.
([208]) Construction Skills Observatory, *Construction blueprint sectoral strategic approach to cooperate on skills in the construction industry - WP2. Status Quo and Sectoral Skills Strategy - R1. Skills needs analysis*, 2021, https://www.constructionskillsobservatory.eu/assets/documents/SkillsNeedsAnalysis.pdf.
([209]) European Centre for the Development of Vocational Training (CEDEFOP), 'Construction workers: skills opportunities and challenges (2023 update)', CEDEFOP website, 19/12/23, accessed 03.11/2025, https://www.cedefop.europa.eu/en/data-insights/construction-workers-skills-opportunities-and-challenges-2023-update#_summary.
([210]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, 'Pact for Skills', European Commission website, accessed 10/11/25, https://pact-for-skills.ec.europa.eu/index_en.

employed work in construction, only 1% of construction services are provided cross-border within the EU. The construction sector might also be affected by restrictive and diverse regulation of construction services ([211]).

6.2.4. Innovation

The construction sector is one of the least innovative sectors in the EU, partially because it is lagging behind in the adoption of advanced digital technologies. According to the 2024 European Investment Bank (EIB) Investment Survey, 75% of construction companies in Europe do not innovate, compared with 67% in other industries ([212]). Only 55% of construction firms use advanced digital technologies, versus 76% elsewhere. Around 32% of EU firms reported innovation activities for 2023, while in the construction sector 24% of firms reported introducing new products, processes or services.

Figure 40: Innovation gap in the EU construction sector



Source: EIB Investment and Finance Survey, 2024.

Fragmentation, risk aversion, lack of investment, slow technological adoption and difficulties attracting talent are among the main reasons behind low innovation in the construction industry. Several barriers slow down the adoption of new technologies and practices in construction. The industry's fragmentation complicates efforts to find the capital needed to invest in technological advancements and coordinate large-scale innovation efforts. In addition, given the high costs and relatively low margins in construction projects, many stakeholders are risk-averse,

([211]) European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *Commission SWD - Annual Single Market Report 2023: Single Market at 30*, Publications Office of the European Union, Luxembourg, 2023, https://op.europa.eu/s/Aaln.
([212]) European Investment Bank (EIB), *EIB Investment Survey 2024: European Union overview,* EIB Economics Department, 2024, https://www.eib.org/attachments/lucalli/20240238_econ_eibis_2024_eu_en.pdf.

preferring to stick to proven methods over experimenting with new technologies or approaches. This is often matched with a gap in the skills needed to adopt, apply and manage innovation, which often entails the use of digital tools, automation, and knowledge of sustainable building practices.

Modern methods of construction and emerging technologies provide opportunities to reduce costs and enhance productivity in the construction sector. Innovative techniques like modular construction, offsite manufacturing and 3D printing as well as the uptake of digital technologies enable firms to reduce operational costs, improve compliance, and foster innovation, thereby driving sustainable growth across the construction value chain.

Offsite construction streamlines the construction process and increases productivity by manufacturing components in a factory and then assembling them on-site. Offsite construction methods – including modular and prefabricated approaches – are gaining traction in the EU construction sector due to their potential to reduce costs, increase precision and productivity, and deliver environmental and social benefits ([213]). These methods can be applied to the construction of new buildings but also to the renovation of existing ones. Offsite construction can lead to increased productivity due to efficient manufacturing, rapid assembly processes and optimised on-site labour requirements. The controlled environment of factories minimises errors, significantly reducing rework and ensures a fast delivery by cutting construction time by up to 60% relative to traditional construction methods. In addition, offsite construction offers innovation spillovers for the development of robotics, advanced manufacturing and advanced materials, environmental benefits (10-15% reduction in construction waste during the production and manufacturing phases), enhanced circularity (disassembling and reconfiguring for repurposing at the end of their life cycle) ([214]), lower costs (estimated cost savings of 20%), faster delivery and better working conditions (e.g. on a fixed workplace and less exposure to changing weather conditions). Offsite construction solutions are very relevant in renovations projects and in the retrofitting of buildings, as they can significantly accelerate project timelines and reduce disruptions for buildings occupants or neighbours ([215]). The European market for prefabricated buildings was estimated to reach a value of EUR 53 billion in 2024, with expectations to grow to

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([213]) European Commission: Directorate General for Internal Market, Industry, Entrepreneurship and SMEs, prepared by Ecorys under the Technical Secretariat of the High Level Construction Forum, Dedeu Dunton, A. Martin, I. Delera, M. and Flickenschild, M., *Research Note on Offsite Construction*, https://build-up.ec.europa.eu/system/files/2025-01/RB385Rpj2z_29_01_2025_083227.pdf.

([214]) Steven Mlote, D., Budig, M., Cheah, L., 'Adaptability of buildings: a systematic review of current research', *Frontiers Built Environment, Sec. Sustainable Design and Construction,* Volume 10 – 03/06/24, 2024, https://doi.org/10.3389/fbuil.2024.1376759.

([215]) BPIE, Glicker, J. and Broer, R., *Industrial prefabrication solutions for building renovation - Innovations and key drivers to accelerate serial renovation solutions in Europe*, 2022, https://www.bpie.eu/wp-content/uploads/2022/06/Industrial_prefabrication_solutions_for_building_renovation_OK_v3.pdf.

close to EUR 70 billion by 2029, or by 5.4% annually ([216]). On the other hand, investments into facilities for modern methods of construction also require reliable long-term demand to be profitable.

The construction sector is not yet using the full potential of digital technologies to enhance efficiency and transform workflows. Investments in the digital transition in the construction system are lower in comparison to other sectors, with the construction industrial sector being the last sector for long-term expected investment (less than 10% annually) ([217]). Cloud software and cloud computing, online platforms and big data, internet of things (IoT) and building information modelling (BIM) are the most in use, contrary to artificial intelligence (AI). In 2023, only 29% of companies in the construction industrial system had a concrete digital transformation strategy in place encompassing technologies like cloud computing, big data, IoT, AI, and augmented and virtual reality. Despite this, many contractors are embracing AI innovations for their potential to transform end-to-end workflows. AI enhances efficiencies in design, construction, operations, and maintenance by automating repetitive tasks and addressing labour shortages. It also optimises projects for sustainability and streamlines the supply chain, improving relationships between contractors and project owners through better predictability. 70% of businesses that have adopted AI have done so within the last two years ([218]).

([216]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs and European Innovation Council and SMEs Executive Agency (EISMEA), *Monitoring industrial ecosystems – Construction - Analytical report: 2024 edition,* Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2826/7599841.

([217]) European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *Commission SWD - Annual Single Market Report 2022*, 2022 https://ec.europa.eu/docsroom/documents/48877.

([218]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs and European Innovation Council and SMEs Executive Agency (EISMEA), *Monitoring industrial ecosystems – Construction - Analytical report: 2024 edition,* Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2826/7599841.

Table 1: Share of businesses in the construction industrial ecosystem that have adopted digital technologies, 2024

Digital Technologies	Share of adoption (2023)	Share of adoption (2024)	
Cloud	27%	37%	↑
Internet of Things	12%	23%	↑
Artificial Intelligence	10%	16%	↑
Big Data	14%	15%	
Augmented and Virtual Reality	11%	14%	
Robotics	5%	9%	↑
Blockchain	4%	4%	
Edge Computing		3%	

Source: European Commission: DG for Internal Market, Industry, Entrepreneurship and SMEs and European Innovation Council and SMEs Executive Agency (EISMEA), 2025.

6.3. Spatial planning, zoning and permitting

Spatial planning and land use, zoning and building permit procedures differ greatly across the EU but are generally considered complex, restrictive and time consuming, thus slowing down housing supply. Public authorities subject building and renovation activities to stringent rules, which ensure compliance with urban development objectives, building codes and standards, land use policies as well as safety and environmental standards. Some of these rules go as far as requiring aspects such as the minimum number of parking lots required ([219]) or where a mail box should be placed. While there is no common definition at EU level, the process to obtain a permission to build or renovate usually consists of three separate steps: 1) spatial planning and land use, 2) zoning, and 3) building and renovation permit requirements. The actual separation of one step from another and details about the process vary from country to country (and region to region, municipality to municipality). This decentralised approach allows for tailored planning that addresses specific community needs, different legal systems, cultural practices, technological advancement and institutional structures ([220]). However, it also results in a myriad of regulatory

([219]) Institut der deutschen Wirtschaft Köln e. V., Oberst, C. and Voigtländer, M., *Optionen für bezhalbaren Neubau – Eine Analyse der Neubaupreise*, Institut der deutschen Wirtschaft, Köln, 2024, https://www.iwkoeln.de/fileadmin/user_upload/Studien/Report/PDF/2024/IW-Report_2024-Optionen-bezahlter-Neubau.pdf.

([220]) Fauth, J., Nørkjær Gade, P., Kaiser, S., Raj, K., Goul Pedersen, J., et al., 'Investigating building permit processes across Europe: characteristics', in: *Building Research & Information*, 53(4), 2025, pp. 417-434, https://doi.org/10.1080/09613218.2024.2400467.

requirements and administrative procedures ([221]), including appeal processes, impacting both the complexity and duration of the process.

Table 2: Spatial planning, zoning and permitting

 **Spatial planning**	 **Zoning**	 **Building and renovation permit**
Territorial organisation of land use and economic demand in respect of environment and social objectives (e.g. residential, industrial, commercial, farming or forestry)	Control of land use, specific designation of what can be built where, and restrictions (building height, density, parking spots, etc.)	Administrative authorisation to start work on a specific building project

Source: European Commission, DG Energy, 2025.

Spatial and land use planning refers to the distribution of people and activities within the territory of a municipality or region. Spatial planning and land use rules aim to provide an effective territorial organisation of land ([222]) and location of economic activities while protecting the environment and achieving social objectives. The competencies for spatial planning primarily reside at national and regional levels, while a variety of practices and systems are in use, stemming from diverse planning traditions and customs.

([221]) Horizon Europe ACCORD - Automated Compliance Checks for Construction, Renovation or Demolition Works – grant agreement no. 101056973. Project reports available at: Accord Project, 'Outcomes', Accord Project website, accessed 11/11/25, https://accordproject.eu/accord-deliverables/.
([222]) Land use is the 'the socio-economic description (functional dimension) of areas: areas used for residential, industrial or commercial purposes, for farming or forestry, for recreational or conservation purposes, etc' (European Environment Agency, 'EEA Glossary', European Environment Agency website, 2004, accessed 11/11/25, https://www.eea.europa.eu/help/glossary/eea-glossary/land-use#:~:text=Land%20use%20corresponds%20to%20the,AND%20LAND%20USE%20Long%20definition.

Zoning is the control of land use generally established by local authorities, who allow different types of development only in fixed areas or zones. It defines the designation and reservation under a plan covering light and heavy industry, dwellings, offices, and other buildings ([223]). It is enforced by applying restrictions on types of buildings in each zone and establishing standards (e.g. building height, number of parking spots, distance from other buildings, etc.).

A building or renovation permit is issued by local authorities in response to an application for a specific project to ensure compliance with building codes and regulations. It is the final administrative authorisation to start work on a specific building project and it can involve consultations with other authorities ([224]). While some municipalities complete the permit process after document review, others require additional inspection phases and multiple sub-approvals, affecting how quickly permits are issued. Staff shortages in the public administration can slow down building projects as they can increase the time needed for processing building permits.

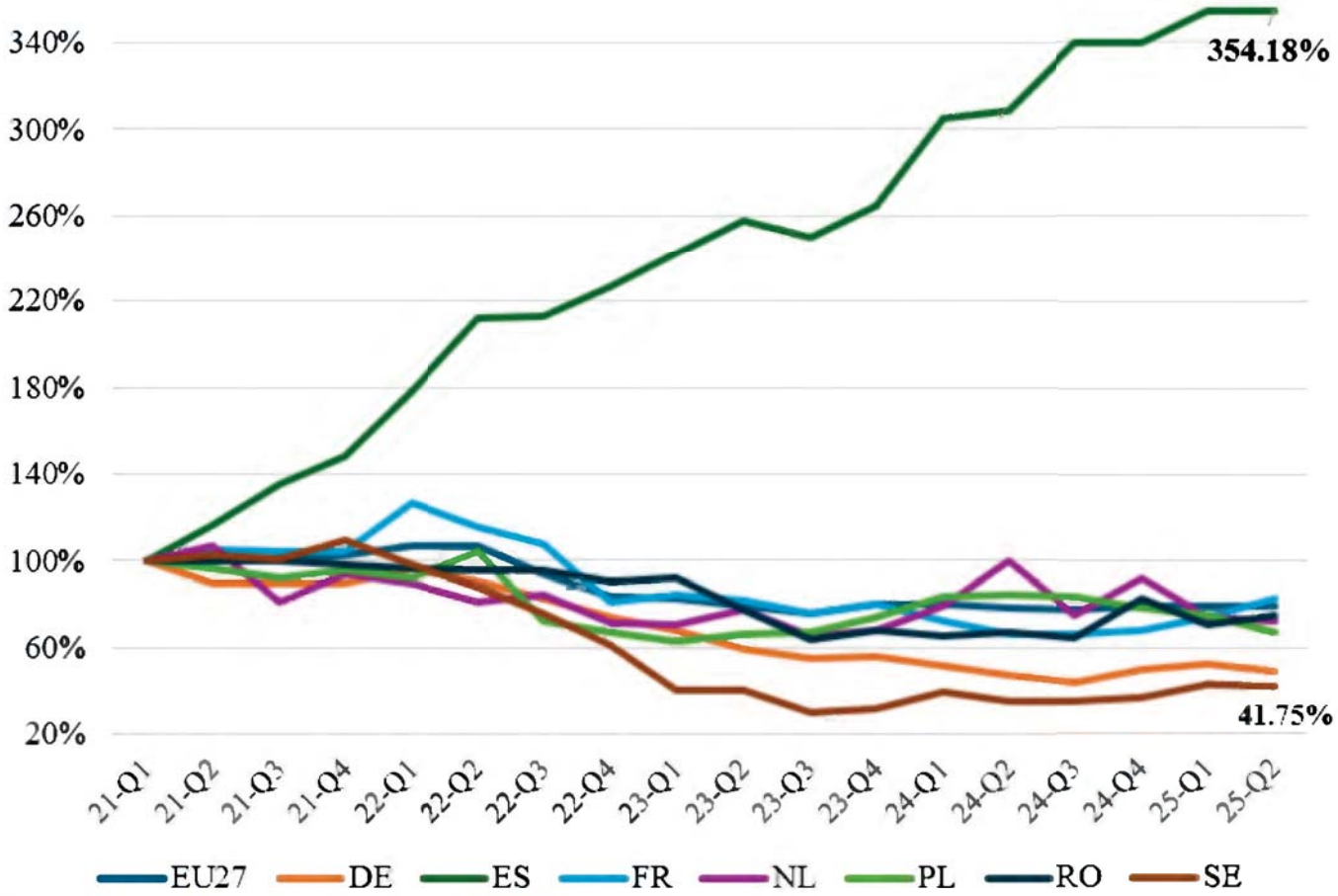
The number of building permits for residential buildings in the EU has been decreasing since 2021, showing signs of a continued decrease in new housing supply and renovations. After a collapse of building permit issuance between 2007 and 2013, permits recorded a gradual increase between 2014 and 2021 (except for downturns in 2020), remaining well below the levels recorded prior to 2007. Since 2021, building permit issuance in the EU has experienced a sharp downturn ([225]) amid rising interest rates, tighter financing conditions and increasing construction costs. Although recent figures show some signs of recovery, the overall number of permits granted remains close to historical lows. Considering an average housing construction period of 24 months after permitting is approved and that not all building permits translate into actual development of projects, according to these data a further decrease in housing supply in the near future is to be expected.

([223]) European Environment Information and Observation Network (Eionet), 'General Multilingual Environmental Thesaurus (GEMET) – 'Zoning' definition', accessed 03/11/25, https://www.eionet.europa.eu/gemet/en/concept/9417.

([224]) European Commission: Eurostat, 'Statistics Explained - Building permit index overview', European Commission website, accessed 27/10/25https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Building_permit_index_overview#Indices.

([225]) European Commission: Eurostat, *Housing in Europe – 2024 interactive edition*, Publications Office of the European Union, Luxembourg, 2024, https://op.europa.eu/s/Aanv.

Figure 41: Number of building permits (number of dwellings) for residential buildings in the EU, 2021 – 2024 (2021-Q1=100)



Source: Eurostat, (sts_cobp_q), accessed 03/11/25.
Notes: "Dwellings" cover residential buildings, except residences for communities.

The most common challenges to obtain building permits include fragmented regulations, lack of fully digitalised processing systems, and subjective interpretation of laws. Answers to a survey carried out by the European Commission ([226]) revealed the most common challenges to obtain a building permit:

- overly complex and fragmented regulations, with no clear deadlines for authorities,

([226]) European Climate, Infrastructure and Environment Executive Agency (CINEA), 'Have Your Say: EU Consultation on Building Permits and Housing Construction', ManagEnergy European Commission website, 13/05/25, accessed 11/11/25, https://managenergy.ec.europa.eu/managenergy-discover/managenergy-news/have-your-say-eu-consultation-building-permits-and-housing-construction-2025-05-13_en#:~:text=As%20part%20of%20its%20upcoming%20Strategy%20for%20Housing,permit%20procedures%20and%20digital%20permitting%20systems%20across%20Europe.

- the need to obtain multiple separate "sub-permits" prior to the main application, each with its own appeal processes, adding significant delays and complexity,
- a lack of fully integrated and digitalised processing systems,
- inconsistent and subjective interpretation of laws by officials, excessive interference in technical matters beyond guidelines,
- bureaucracy and lengthy waiting times - sometimes beyond six months,
- excessive documentation demands shifting focus away from design toward paperwork, while issues with city planning requirements and advisory boards create additional hurdles.

Design and architectural constraints as well as compliance and preservation measures are considered the most significant challenges in obtaining building permits. Based on the same survey it appears that design and architectural constraints, performance and safety compliance, heritage preservation measures, and parking norms are perceived as most problematic in obtaining a building permit. Those perceived as less problematic are affordability criteria, demolition audits, green space quotas, mobility plans and financial compensation requirements. Given that the survey was limited in scope, the Commission is carrying out a more in-depth study which will be available in 2026 ([227]).

Layers of overly restrictive housing rules and regulations substantially increase costs across design, compliance, and project delivery phases. Governments, regional and local authorities introduce rules, standards and norms or procedures related to housing, adding layers of administrative complexity that delay implementation and inflate costs. In most cases, requirements are unrelated to EU legislation, e.g. where a mailbox should be placed, heating in corridors and staircases, the minimum number of parking places, power sockets. Eurochambres (2025) concluded that excessive regulation leads to the introduction of unnecessarily high standards, which delay housing projects, increase construction costs, and particularly harm small and medium-sized enterprises that lack the resources to adapt to fragmented regulatory environments ([228]). The European Parliamentary Research Service (2025) similarly highlights that divergent national regulations and fragmented technical standards across Member States hinder housing

([227]) *'Study on the state of play of building permits for housing in the EU, and potential impact of implementing measures to streamline, shorten and digitalise the process'* Call for tenders EC-GROW/2025/OP/0094 launched in June 2025.
([228]) Eurochambres, 'Eurochambres Position on the European Affordable Housing Plan', Eurochambres website, 13/9/25, accessed 03/11/2025, https://www.eurochambres.eu/wp-content/uploads/2025/10/251013-Eurochambres-position-on-the-European-Affordable-Housing-Plan_.pdf.

affordability by raising compliance costs and delaying construction ([229]). Consistent with this, the European Construction Sector Observatory (2025) notes that regulatory complexity and lengthy permitting procedures remain key barriers to scaling up innovative, cost-saving methods such as off-site construction, thereby limiting the potential to expand affordable housing supply ([230]). A recent case study from Poland illustrates this effect, showing that reporting and certification obligations under national building codes increased construction project budgets by up to 15% compared with neighbouring states applying EU rules more faithfully ([231]). Similarly, Ireland's expanded environmental impact assessments (EIA) beyond EU requirements have been identified as impacting on delivery timelines ([232]). The Irish government is planning to streamline the scope of information required for EIA to reduce the volume of material submitted which should, in turn, shorten the time needed to carry out the assessment.

The time to obtain a building permit in the EU varies significantly, from a few weeks to several months. The average time required for obtaining a building permit in the EU varies widely, ranging from a few weeks to several months, due to differing regulations and procedures, administrative capacity and backlogs, and the level of digitalisation. Validity periods for permits also differ, typically ranging from 3 to 4 years, with extensions possible under certain conditions. In nearly all EU Member States, objections and additional information can be submitted to the building authorities during the plan approval stage or before the final permit is issued. While some countries enforce strict deadlines and structured procedures (e.g. Italy, Lithuania), others involve multiple approval stages, including appeals, public displays and council approvals (e.g. Belgium, France). The European Network for Digital Building Permit ([233]) has established that across the Member States analysed, processing times range from 10 to 120 days, depending on the project's complexity and national regulations. Specific research on residential building permitting times is not available for all of the EU. This knowledge gap will be closed by a study launched by the

([229]) European Parliamentary Research Service (EPRS): *A coordinated EU approach to housing*, Briefing, Members' Research Service, PE 767.189 – May 2025, https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/767189/EPRS_BRI(2025)767189_EN.pdf.
([230]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, *Market potential of offsite construction for housing supply – Report*, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2873/3569150.
([231]) SprawdzaMY and DZP, *Gold-plating and overregulation in the harmonization of the Polish legal system with the EU law*, SprawdzaMY& DZP Report, May 2025, https://sprawdzamy.com/static/files/gold-plating-may-2025-eng.pdf.
([232]) Irish Government: Department of Public Expenditure, Infrastructure, Public Service Reform and Digitalisation document Accelerating Infrastructure Report and Action Plan, https://assets.gov.ie/static/documents/a1ef9433/Accelerating_Infrastructure_Report_and_Action_Plan.pdf , accessed 03/12/2025.
([233]) Fauth, J., Deac-Kaiser, S.-B., Nørkjær Gade, P., Raj, K., Goul Pedersen et al., *Comparative study on building permit processes in Europe.* European Network for Digital Building Permit (EUnet4DBP) Publication Series, 2025, 10.5281/zenodo.14178512.

European Commission ([234]). A study conducted by KU Leuven and IDEA Consult in 2024 showed that in Belgium ([235]), for a housing project of more than 20 residential units, in a best-case scenario it takes 2 years and 5 months to obtain a permit. Most of this time is spent on the preliminary phase (verifying all applicable regulations and building codes, preliminary discussions with the permitting authority, etc.). In the worst-case scenario, the entire process takes 6 years and 5 months if appeals are filed, extending the processing time by 4 years.

Long and uncertain permitting procedures have a substantial financial impact on construction projects in the EU. Across the EU, stakeholder surveys confirm that lengthy permit approvals raise costs and delay housing delivery. For example, the OECD reports in its review of the Brussels Capital- Region that for every month of delay in approving new building permits, a housing market's ability to meet housing demand falters and that the procedure adds expenses, delay and uncertainty, which increases the total cost ([236]). That longer permitting processes for residential/mixed-use developments are associated with significant increases in construction prices was concluded also for Prague ([237]). This study estimates that the lengthy permitting process adds about 16.5% to residential construction costs. For mixed-use developments, the cost increase is slightly higher at 16.95%, while office buildings see about a 9.55% increase. Market analyses in the renewable energy sector, which face comparably long permitting timelines, estimate that delays reaching several years can add 10-35% to total project costs, implying a monthly cost increase in the 1-2% range of project value due to financing and regulatory risks ([238]).

The uncertainty in the building permitting process can present several risks and implications for developers and those trying to build, from delays in projects timelines to financial risks, resulting in lower housing supply. Uncertain permitting procedures contribute to increase in construction costs and limit housing supply by reducing construction plans and developments. Unpredictable timelines can lead to significant delays to project schedules, disrupt planning, and potentially increase costs related to labour, materials, and financing. Prolonged permitting

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([234]) "*Study on the state of play of building permits for housing in the EU, and potential impact of implementing measures to streamline, shorten and digitalise the process"* Call for tenders EC-GROW/2025/OP/0094 launched in June 2025.

([235]) KU Leuven, Vastmans, F., *Economische Impact van het Vergunningenbeleid in België*, 2023, https://www.faba.be/wp-content/uploads/2024/04/Studie-Economische-impact-van-het-vergunningenbeleid-in-Belgie-finaal-nl-teu-240415.pdf.

([236]) OECD, 'OECD Territorial Reviews: Brussels-Capital Region, Belgium', in: *OECD Territorial Reviews*, OECD Publishing, Paris, 2024, https://doi.org/10.1787/0552847b-en.

([237]) Lukavec, M., Čáp, V., and Čermáková, K., 'How permitting process length influences development costs and real estate prices', in: *Economics and Environment*, *89*(2), 2024, pp. 768-768, https://doi.org/10.34659/eis.2024.89.2.768.

([238]) World Economic Forum, Piotrowski, M. and Gislén, M., 'How permitting processes are hampering Europe's energy transition', World Economic Forum website, 1/09/24, accessed 11/11/25, https://www.weforum.org/stories/2024/09/wind-energy-permitting-processes-europe.

processes can increase the costs of a project, since developers may incur additional expenses due to extended loan periods, increased fees, redesigns and modifications, or penalties for not meeting initial project deadlines. In addition, delays and uncertainties can also affect a developer's ability to secure financing as banks are more reluctant to issue construction loans when project approval timelines are unclear or subject to local legal challenges. Developers may shift investments to projects, where administrative processes are less burdensome and timelines are more predictable, which is notably the case of renovations ([239]). While this is not the only reason for the recent decline in housing supply, the risks associated with complex and unpredictable permitting processes have a negative impact on building permit requests and housing supply.

In addition to simplifying the underlying requirements, digitalisation is a key component of a number of EU countries' efforts to streamline building permit processes, with considerable differences across the EU. Digitalisation of building permit processes can enhance administrative efficiency, reduce paper usage, and simplify the process for applicants ([240]). It can also shorten the time needed for designers and authorities to review regulatory compliance and enhance the transparency of the construction process. Despite these advantages, digitalisation and automated compliance are only partially implemented. The level of digitalisation varies widely among Member States; although submission processes are often digitalised, verification tends to remain manual. While most countries have partially digitalised their systems, the Czech Republic and Romania still primarily use manual processes. Digital capacity in local and regional authorities remains a barrier to the deployment of modern digital permitting systems and contributes significantly to procedural delays. Also, in some countries, digitalisation means the ability to submit documentations in PDF form or online (Level 2 in **Error! Reference source not found.**), whereas Estonia and Finland are nearing full digitalisation of their permitting processes (Level 4, **Error! Reference source not found.**).

Table 3: Levels of digitalisation of building permitting systems

Digitalisation level	Main characteristics	Other characteristics
Level 1	• All documents, including drawings, are submitted in paper form • Authorities check the application against applicable regulations manually	• Information on the process is available physically at the municipality's premises, or on some basic website

([239]) ING, van Sante, M., 'EU Construction Outlook: Strong decline this year but signs of recovery in 2025', ING THINK website, 03/09/25, accessed 11/11/25, https://think.ing.com/articles/eu-construction-outlook-strong-decline-this-year-but-signs-of-recovery-for-2025/.

([240]) Ullah, K., Raitviir, C., Lill, I. and Witt, E., 'BIM adoption in the AEC/FM industry – The case for issuing building permits', *International Journal of Strategic Property Management*, vol. 24 no. 6, Vilnius Gediminas Technical University, 2020, pp. 400–413, https://doi.org/10.3846/ijspm.2020.13676.

		• Every interaction between the two parties is done in-person and/or letter
Level 2	• Documents and data related to the application can be submitted online • The municipality accepts drawings created via 2D or 3D software programs, or Pdf files, or scans of physical drawings. • Authorities check the application against applicable regulations manually or partially automated	• Applicants can gather, provide, and receive information and documents online • Every interaction between the two parties is done by email or phone
Level 3	• Documents and data related to the application can be submitted online • Applicants submit a BIM model of their project Authorities check the application against applicable regulations automatically through BIM.	• Applicants can use a Digital ID to register the request and dedicate digital folder is used to share and store documents. • Using BIM allows both parties to collaborate and communicate through the BCF (BIM Collaboration Format)
Level 4	• Documents and data related to the application can be submitted online • Applicants submit a BIM model of their project. The applicant can visualise its project in a 3D model of the surrounding environment, thanks to GIS integration • The application is checked against applicable regulations automatically through BIM complemented with GIS information.	• Applicants can progressively upload data and information about the request of a permit with automatic check. • To improve the applicant's experience, an AI Chatbot is available in the municipality's website to provide relevant answers to applicants

Source: *European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, 2025.*

Digitalisation can offer economic benefits and efficiency improvements. Several studies have quantified the potential economic savings and efficiency increase related to the digitalisation of building permitting. In Estonia, the cost-benefit analysis of introducing a Building Information Model (BIM)-based process for building permits ([241]) showed a potential saving of more than EUR

([241]) Future Insight Group, Klooster, R., van Deth, J., van Berlo, L. and Meijer, S., *Introducing a Building Information Model (BIM)-based process for building permits in Estonia – Final Report - Contract SRSS/C2019/024*, 2019, https://eehitus.ee/wp-content/uploads/2019/12/Final-report.pdf.

500,000 annually, without including benefits and cost reductions resulting from clearer regulations and interpretations, which in turn reduce time and effort.

6.4. Land scarcity and cost of land

Land scarcity and costs remain one of the main barriers to increasing housing supply. Land is a finite resource. It has economic properties that are different to other forms of capital: it is permanent, it does not depreciate over time and its supply is fixed ([242]). In areas with high demand, land value tends to increase over time even when no additional investments are made on it, influencing rising property prices ([243]). Its location, value, quality, susceptibility to disaster and climate risk, pollution level, environmental considerations and biodiversity, as well as policies to develop agricultural, forestry and other economic activities influence how land is used. Compact and denser housing developments - including adaptive reuse of buildings, densification, repurposing and use of vacant buildings - can increase the efficiency of the use of land and other resources for housing (e.g. transport infrastructure, energy, communal space), while preserving the environmental services provided by open land, rather than diffuse urban expansions. Change in zoning can also help to increase the availability of land for residential purposes (for example by promoting mixed zoning and including housing in office or commercial districts).

Some regulatory and land use requirements can be significant constraints on construction, limiting land availability for housing and driving up prices.

Increasing the number of floors that are permitted, and mixed-use zoning can help to increase the availability of land for residential purposes. The recent rise in house prices is part of a broader, long-term trend of rising land prices driven by factors including limited land availability (potentially to a larger extent than construction costs ([244])), especially in major cities, where available land is scarce, and constraints on its use. Financial institutions offer different, more stringent lending terms for land acquisition compared to housing development projects.

Despite a considerable amount of EU land being converted to urban land in the 2000-2018 period, land remains a scarce and costly resource for housing. Across the EU, around 75% of

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([242]) European Commission: Directorate-General for Economic and Financial Affairs, Cousin, G., Frayne, C., Martins, V. and Vašíček B., *Housing in the European Union: Market Developments, Underlying Drivers, and Policies*, European Economy Discussion Papers, No 228, October 2025, Publications Office of the European Union, Luxembourg, 2025, https://op.europa.eu/s/z99T.

([243]) A lower share of available land in municipalities is correlated with higher prices, see: European Commission: Joint Research Centre, Batista e Silva F et al., *Place-based determinants of housing prices in Europe*, JRC Science for Policy Brief, 2025.

([244]) According to a study on 14 OECD countries: 84 % of the rise in house prices from 1950 to 2012 can be attributed to rising land prices (Knoll, K., Schularick, M., and Steger, T., *No Price Like Home: Global House Prices, 1870–2012,* American Economic Review 2017, 107(2): 331–353, https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.20150501).

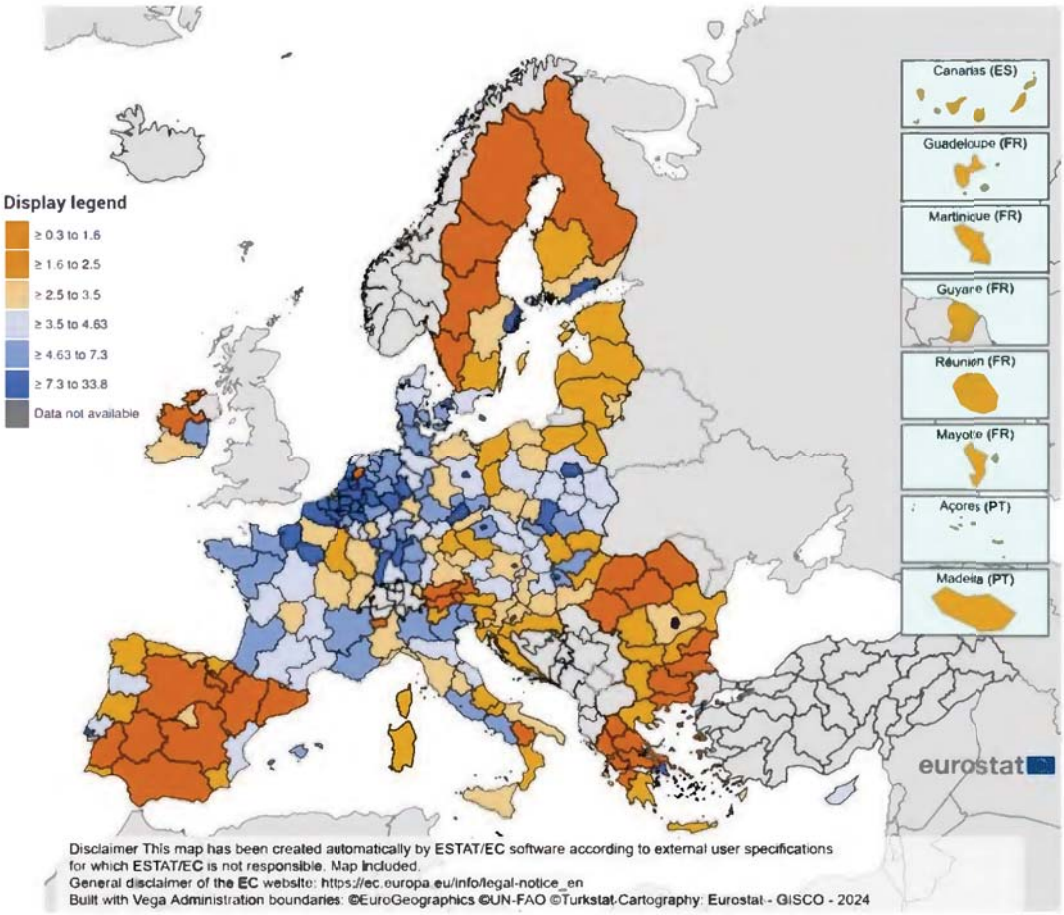
land is used for agriculture and forestry, while only 3% are designated to residential purposes (Figure 42). However, there are significant regional differences, with cities and surrounding areas being much more residential, but also providing far fewer possibilities for increasing the supply of land to expand housing provision. However, from the nearly 3 million hectares which changed from one land use category to another between 2000 and 2018, 44% was converted to urban land ([245]) and nearly 9 times more land was converted to urban/artificial use ([246]) than vice versa ([247]) (Figure 42).

Figure 42: Residential areas, 2022 (% of land use)

([245]) ESPON, Cotella, G., Evers, D., Janin, R., Solly, A. and Berisha, E., *ESPON SUPER – Sustainable Urbanisation and land-use Practices in European Regions – A Guide to sustainable urbanisation and land-use,* ESPON EGTC, Luxembourg, 2020, https://ec.europa.eu/regional_policy/rest/cms/upload/24082020_125113_espon_super_final_report_annex_5___handbook.pdf.

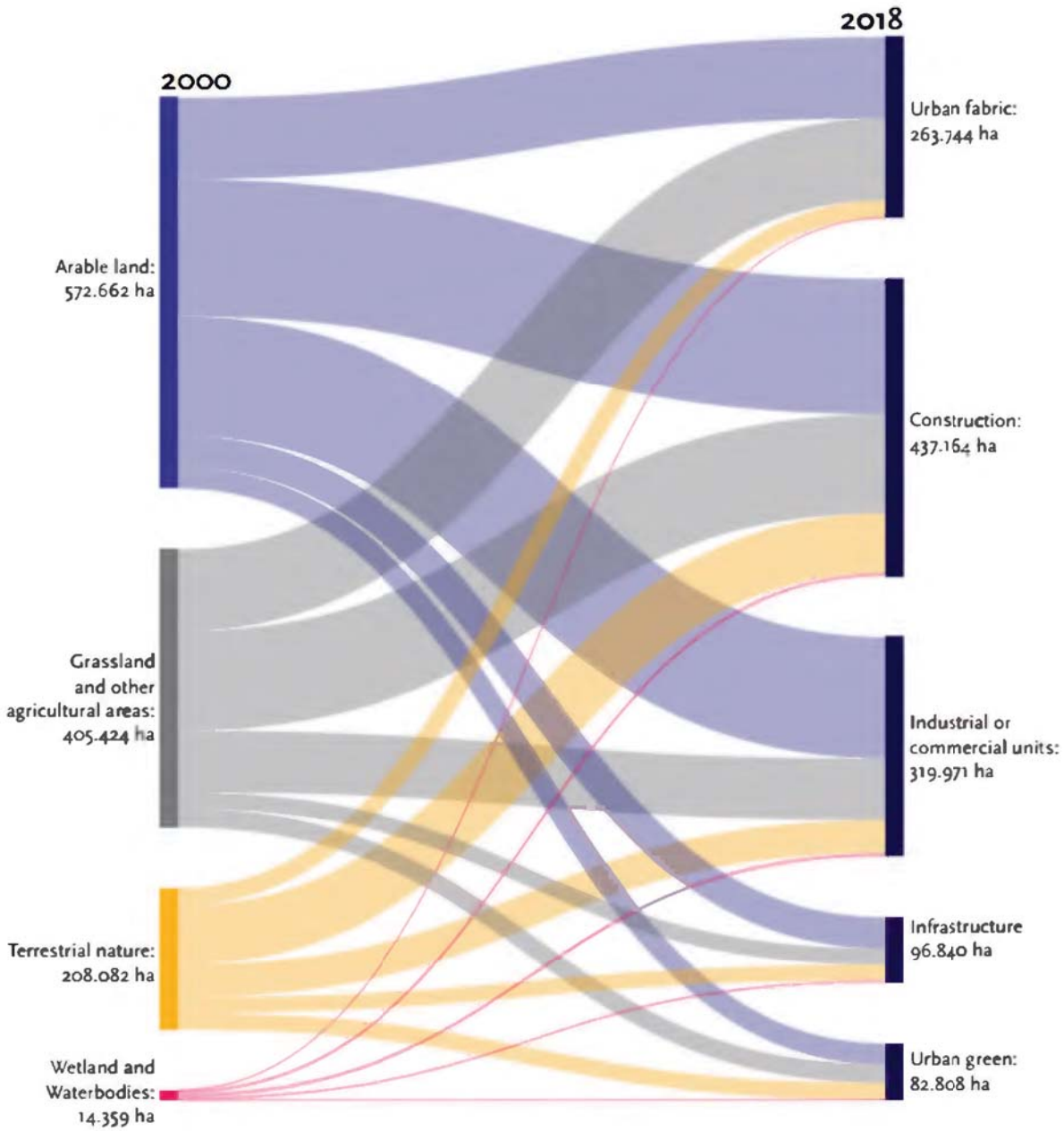
([246]) Artificial use of land (or land take) refers to the conversion of natural and semi-natural areas—including agricultural, forest, and other land—into land for human development and infrastructure.

([247]) Most of this urbanisation came at the expense of agricultural land (78%). See: ESPON, Cotella, G., Evers, D., Janin, R., Solly, A. and Berisha, E., *ESPON SUPER – Sustainable Urbanisation and land-use Practices in European Regions – A Guide to sustainable urbanisation and land-use,* ESPON EGTC, Luxembourg, 2020, https://ec.europa.eu/regional_policy/rest/cms/upload/24082020_125113_espon_super_final_report_annex_5___handbook.pdf.



***Source*:** Eurostat (lan_use_ovw), accessed 03/12/2025.

Figure 43: Land converted to urban use in the 2000-2018 period



Source: *German Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany (BBSR) and ESPON SUPER Project, 2020.*

Given the scarcity and cost of land for greenfield investment, optimising the use of existing land and buildings is key. Greenfield projects are developed on new sites where the land has not been previously developed or built upon, often located in the periphery of cities or in rural areas. They can face higher upfront costs (including land acquisition costs and developing the necessary infrastructure) and long regulatory processes and permits (e.g. land use, permits, water usage, environmental assessments, waste). Brownfield projects like densification, adaptive reuse and

repurpose of existing buildings and use of vacant buildings are developed on existing sites, generally located within urban areas ([248]).

Greenfield, brownfield and adaptive reuse and repurpose projects' financial requirements, timeframes, and return on investment can differ significantly. Greenfield projects require substantial more upfront capital for developing the necessary primary infrastructure (electricity, water) as well as the necessary secondary infrastructure/services (transport, schools, hospitals, etc), and related construction costs. Brownfield developments may require sanitation of land, sanitation of demolition waste, expensive selective demolition, and expensive building within suboptimal structures and are economically viable in areas with high pressure on the real estate markets, where sales prices are high enough to offset all the supplementary costs. Investments in densification, adaptive reuse and repurpose of existing buildings and use of vacant buildings require substantial less upfront capital for developing the necessary infrastructure, but may need capital for adapting building codes, site acquisition, site restauration ([249]), expansions, or other upgrades.

6.5. Better use of the existing building stock

In areas where new construction is currently constrained, prioritising the use of the existing building stock can mitigate the effects of insufficient new construction. Construction of new dwellings is not the only way to increase supply, especially in case of lack of available land or high land costs. A better utilisation of the existing building stock (especially in high-demand areas), including use and renovation of vacant dwellings or vacant parts of non-vacant housing units, the subdivision of underused large dwellings (to meet increasing demand from one- and two-person households), and the repurposing of non-residential buildings for residential use, also offer significant potential ([250]). A better use of the existing stock will also lead to cost savings in terms of land use and infrastructure. Buying existing vacant units can also be a way to ramp up the social housing stock, if a Member State or Municipality pursues this goal.

([248]) European Environment Agency, 'EEA Glossary', European Environment Agency website, 2004, accessed 11/11/25, https://www.eea.europa.eu/help/glossary/eea-glossary/brownfield-site.
([249]) E.g., link to potential contamination or use of hazardous materials.
([250]) European Commission: Directorate-General for Environment, Bankert, E., Graaf, L. and Toth, Z., *Conversion of offices into affordable housing – Final report,* Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2779/2700718.

Nearly 20% of unoccupied dwellings across the EU, along with 9.7% of vacant offices, present a significant opportunity to increase housing supply. Current definitions of unoccupied dwellings include empty or unused dwellings, as well as those used as seasonal or secondary residence ([251]). The proportion among these categories of 'unoccupied' dwellings is unclear and the variability per country and region is high (Figure 44). Definitions and estimates by research centres and housing experts also differ ([252]). Further research on the criteria to define and identify vacant dwellings, a mapping of their distribution across the EU and in particular in housing markets under stress, an analysis of their ownership and the reasons behind their vacancy would help understand which and how many units could be brought back to the market ([253]). Despite the demand pressure and modest supply growth, the Joint Research Centre estimates that between 2011 and 2021 the proportion of unoccupied dwellings ([254]) increased from 17.3% to 19.4% (see Figure 44 for 2021 overview) ([255]), while the total number of dwellings increased by 9%.

([251]) Eurostat does not have a single, universally applied definition of unoccupied or vacant building; its classifications distinguish between occupied, vacant, empty, and seasonally/secondarily used dwellings. 'Empty conventional dwellings' refer to conventional dwellings that aren't the usual residence of any person at the time of the census. These include dwellings reserved for seasonal or secondary use, vacant dwellings and conventional dwellings with people present but not included in the census (see: European Commission: Eurostat, 'Reference metadata – Dwellings (cens_10ndws)', European Commission website, accessed 11/12/25, https://ec.europa.eu/eurostat/cache/metadata/en/cens_01ndws_esms.htm#:~:text=A%20dwelling%20is%20a%20statistical,further%20distinction%20is%20made%20between:). National statistics may also vary and include seasonal/secondary homes in their "vacant" counts.

([252]) European Commission: Directorate-General for Environment, *Sufficiency in the building sector – For the whole life carbon roadmap – Final report*, Publications Office of the European Union, 2024, https://data.europa.eu/doi/10.2779/5787055; FEANTSA, Laudes Foundation, *Reclaiming Vacant Spaces to tackle housing and homelessness crises in Europe*, 2025, https://www.feantsa.org/en/report/2025/05/21/reclaiming-vacant-spaces-to-tackle-housing-and-homelessness-crises-in-europe#:~:text=Published%20by%20FEANTSA%20and%20supported%20by%20Laudes%20Foundation%2C,identifies%20the%20barriers%20and%20opportunities%20linked%20to%20conversion.

([253]) The European Commission is launching a study to advance knowledge regarding the potential of better use of existing buildings in the EU. The study shall provide a clear picture of how different kinds of building policies as well as other conditions can impact the potential for measures such as office conversions, vertical extensions and dividing existing housing into several smaller housing units. The study will also investigate how data related to better use of existing buildings can be generated and shared, to allow for useful monitoring of e.g. vacant or underused building as well as conversion and infill potentials.

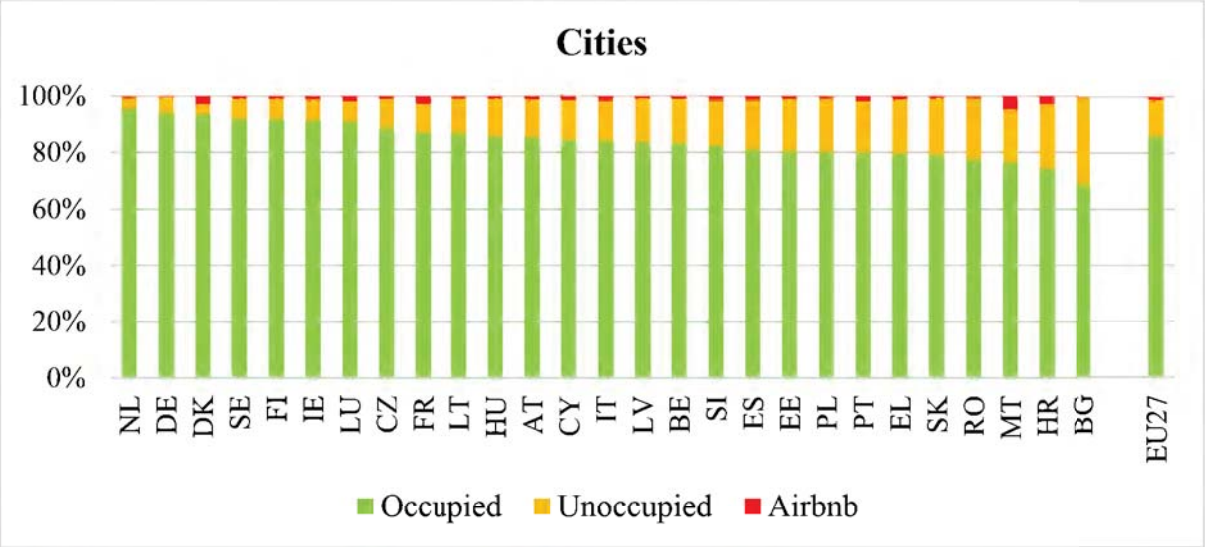
([254]) Defined as the share of dwellings that are not used for primary residence nor allocated to STRs.

([255]) Higher than population growth but lower than household growth, based on Census data. See: European Statistical System, 'Census Hub', European Commission website, accessed 27/10/25, accessed 28/11/25, https://ec.europa.eu/CensusHub/selectHyperCube?clearSession=true.

Eurostat data also show that about 20% of conventional dwellings ([256]) were unoccupied in the EU in 2021 ([257]), though often those properties are not located where most needed.

More investigation is needed into the reasons for why homes stay empty, and what disincentives might undermine long-term rental offerings. Early research indicates that "owners act not only as economic agents, but also as guardians of family heritage, navigating uncertainty in a legal and symbolic environment that they increasingly consider hostile, and that unlocking empty housing stock requires more than tax incentives or coercive measures. It will require rebuilding trust, legal predictability and recognition of the cultural meanings that shape real estate decisions" ([258]).

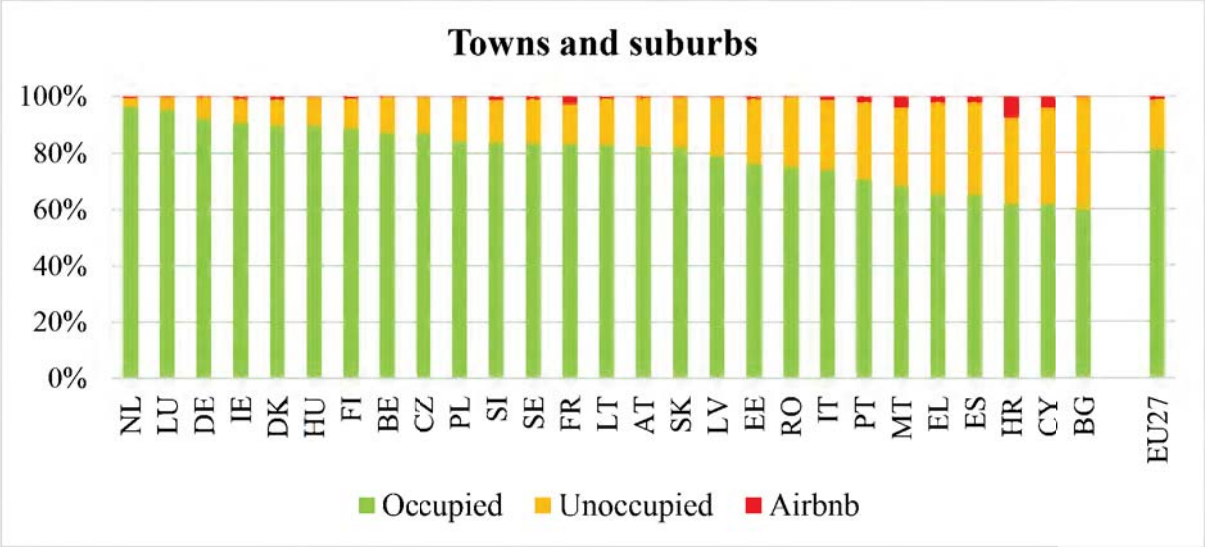
Figure 44: Housing supply and unoccupied buildings in 2021 (Cities, towns and suburbs, rural areas)

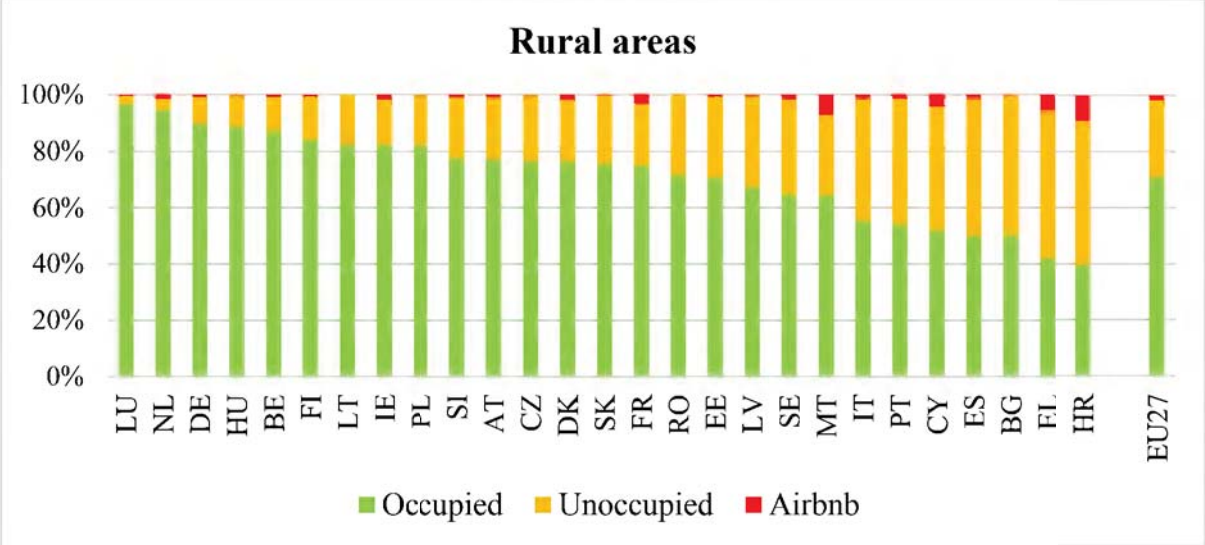


([256]) Conventional dwellings are structurally separate and independent dwellings at fixed locations designed for permanent human habitation. At the reference date, these conventional dwellings may be used as a residence, vacant, or reserved for seasonal or secondary use. See: European Commission: Eurostat, 'Statistics Explained - City statistics – social conditions', European Commission website, accessed 05/12/25 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=City_statistics_%E2%80%93_social_conditions#:~:text=The%20number%20of%20conventional%20dwellings,York%20and%20Geneva%2C%202015.

([257]) European Commission: Eurostat, Census 2021 round: 'Conventional dwellings by occupancy status, type of building and NUTS 3 region', (cens_21dwob_r3), 2021, accessed 11/11/2025.

([258]) Gonçalves, J. and Jorge, S., *Why Homes Stay Empty: Understanding Property*, 2025, DOI:10.20944/preprints202511.0479.v1.





Source: European Commission: Joint Research Centre, 2025, based on Eurostat census data (2021) and AirDna webscraping (2025).

7. KEY HOUSING OBJECTIVES: AFFORDABLE, SUSTAINABLE, AND QUALITY HOUSING

A critical objective of housing policy is to ensure access to not just affordable, but also sustainable and quality housing that meets the needs of people both in urban and rural areas. This section examines key aspects of sustainability and quality in housing (including accessibility and inclusiveness) highlighting how their synergy can help create affordable housing solutions. The dynamics at play in balancing affordability, sustainability, and quality housing solutions in their full range are complex, and this section only provides an overview of main issues.

7.1. Affordability, sustainability and quality: Interaction and mutual benefits

The relationship between affordable housing and its quality affects sustainability, safety, comfort, accessibility and health. A "quality home" is more than a roof over our head, it should have a sound structure, be free from hazards, and accommodate sleeping, personal hygiene, food preparation, and storage. Additionally, it should be a place for relaxation, privacy, quiet, and social interactions, it should be well connected, have access to basic services, and it should be accessible in all its elements to all its residents (including common areas like stairs, cellars, elevators as well as outdoor common areas). These elements contribute to a housing environment that supports the overall well-being and quality of life of its residents ([259]). Housing conditions affect health and well-being, with risks associated to indoor and outdoor air pollution or noise, exposure to extreme temperatures, dampness, mould, disease-bearing vectors like pests and insects, inadequate access to clean drinking water and sanitation and the use of unsafe construction materials. Poor indoor air quality (IAQ) comes from inadequate ventilation, combustion for heating and cooking (indoor smoke poses cardiovascular, respiratory, and cancer risks), toxic building materials and substances (e.g. paints and glues, asbestos), and radon exposure, while outdoor air pollution originates from fossil fuel (especially coal) and wood ([260]) heating and other sources ([261]). In rural areas, housing conditions are often poorer, with homes being old, energy-inefficient, and in need of renovation

([259]) Freedom to choose to move house, shelter or any other appropriate accommodation is also essential, especially for people in vulnerable situations, like elderly, victims of domestic violence, or people with disabilities.
([260]) European Environment Agency (EEA), 'Europe's air quality status 2024', EEA website, 06/06/24, accessed 05/12/25, https://www.eea.europa.eu/en/analysis/publications/europes-air-quality-status-2024.
([261]) World Health Organisation (WHO), ' Environment, Climate Change and Health – Housing - Health risks, WHO website, accessed 05/12/25, https://www.who.int/teams/environment-climate-change-and-health/healthy-urban-environments/housing/health-risks#:~:text=The%20housing%20sector%20has%20an,household%20emissions%20and%20other%20sources.

or modernisation. This can lead to greater exposure to cold, heat and poor indoor air quality ([262]). Despite a decrease in EU average of fine particulate matter ([263]), the most hazardous of the common air pollutants, levels of $PM_{2.5}$ have been consistently higher in the poorest regions. To achieve good-quality housing, standards and norms are key, although overly strict requirements beyond what is necessary can increase construction and renovation costs (see Section 4).

Affordability and sustainability are mutually reinforcing goals over the lifetime of a building. Housing that is durable, resource-efficient, and well-designed is ultimately more affordable over its lifetime, is more resilient to extreme climate events and brings societal benefits. Focusing on sustainability and quality in housing means minimising environmental impact while maximising health and safety, comfort and liveability, improving energy performance and reducing bills for the long-term benefit of inhabitants. The costs associated with the adoption of sustainable construction practices are offset overtime. As experience and scalability improve, sustainable and quality buildings deliver costs savings through lower maintenance and energy needs. Focusing on sustainability and quality in housing means reducing environmental impacts while enhancing health, safety, comfort and energy performance to lower bills and improve long-term affordability. Improved urban and building infrastructures, low whole-life-carbon and energy-efficient solutions, resilience to climate risks and environmental hazards, the advancement of sustainable transport solutions, the greening of residential areas and the promotion of circularity in waste and water management, contribute to providing better access to jobs and services, reducing energy and insurance bills, creating more cohesive neighbourhoods and improving affordability and quality of life for the long term.

Energy poverty is a significant challenge across the EU and affects around 42 million people who are unable to afford to live comfortably in their homes ([264]). Energy poverty occurs when

([262]) European Commission: Joint Research Centre, *Exploring rural energy poverty and needs – Rural households spend more on energy but lead in renovations*, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/9160880.

([263]) European Environment Agency (EEA), 'Thematic briefing – Europea's environment 2025 – 3.6 Environmental health inequalities related to air pollution', EEA website, 29/09/25, accessed 05/12/25, https://www.eea.europa.eu/en/europe-environment-2025/thematic-briefings/environment-and-human-health/environmental-health-inequalities-related-to-air-pollution#:~:text=This%20briefing%20explores%20environmental%20health%20inequalities%20by%20comparing,product%20%28GDP%29%20per%20capita%20%28adjusted%20for%20purchasing%20power%29.

([264]) According to Eurostat (ilc_mdes01), in 2024 9.2% of the EU population was unable to keep their homes adequately warm 2024. Depending on the indicator selected, JRC (European Commission: Joint Research Centre, 'Who's energy poor in the EU? It's more complex than it seems', Joint Research Centre website, 25/09/24, accessed 11/11/25, https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/whos-energy-poor-eu-its-more-complex-it-seems-2024-09-25_en) estimates that between 8% and 16% of the EU population is facing energy poverty. The same study shows substantial cross-country variation in energy-poverty rates—especially in subjective indicators—as well as in the overlap across the four indicators. For

a household must reduce its energy consumption to a degree that negatively impacts the inhabitants' health and wellbeing. It is based on several indicators, such as the inability to keep homes adequately warm (or cool), delays in paying utility bills, and the presence of damp or poor living conditions ([265]). In 2020, low-income European households spent on average 7.3% of their total budget on energy, which increased to 7.5% by 2022 ([266]), in some Member States even above 10% ([267]). Several factors contribute to energy poverty in the EU, including energy inefficient building stock and poor-quality housing.

Poor-quality housing negatively impacts health and well-being, disproportionately affecting low-income and other vulnerable groups. People and communities in situations of vulnerability, and people living on low income, face cumulative disadvantages that can be exacerbated by poor-quality housing. In the EU in 2024, nearly 16.9% of the population were living in overcrowded homes ([268]); 9.2% did not have the ability to keep the home adequately warm and ([269]); 16% lived in houses with leaking roof, damp walls, floors or foundation, or rot in window frames or floor (see Section 2.1). These figures are worse for persons with disabilities, for example 23% of persons aged 16+ with disabilities live in a dwelling not comfortably warm during winter compared to 17% of the general population aged 16 and older ([270]). These vulnerabilities often intersect with the territorial context: in rural areas, homes are frequently older, less insulated, and in need of renovation, which can amplify health and comfort risk. The importance of the ability to cool homes is also increasing: in urban areas, where construction is dense and green spaces are limited, the

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example, while in Greece and Bulgaria about 30% of the population is energy poor by at least two indicators, this share is below 5% in most Western and Northern EU countries.

([265]) Energy poverty definition in Directive (EU) 2023/1791 on Energy Efficiency, art. 2(52): 'energy poverty' means a household's lack of access to essential energy services, where such services provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing national social policy and other relevant national policies, caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes

([266]) European Commission, *Report on Energy Prices and Costs in Europe* COM(2025) 72 final, 2025, https://data.consilium.europa.eu/doc/document/ST-6575-2025-INIT/en/pdf#:~:text=Household%20energy%20expenditure,and%206.9%25%20in%202010).&text=decile;%20and%20the%20fifth%20income,from%20the%20Household%20Budget%20Survey.

([267]) Lower-middle- and middle-income households tend to have higher absolute energy expenditure, but this expenditure represents a smaller share of their household budget.

([268]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC), 'Overcrowding rate by income quintile - total population', (ilc_lvho05q), 2024, accessed 03/12/25.

([269]) The highest shares were observed in Spain, Portugal (both 20.8%) and Bulgaria (20.7%), and the lowest in Luxembourg (2.1%), Finland (2.6%) and Slovenia (3.6%). See: European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC), 'Inability to keep home adequately warm' (ilc_mdes01), 2024.

([270]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC), 'Inability to keep home adequately warm' (ilc_mdes01), 2024.

urban heat island effect causes serious discomfort and elevated mortality rates ([271]). In 2023, 26% of EU households reported they were unable to keep their homes comfortably cool. This figure rises to nearly 35% among the lowest income group and early findings indicate that those already affected by energy poverty during winter are likely to struggle in summer too ([272]). Adaptation to hot temperatures requires investment in insulation, air–conditioning systems and solar shading, which are often unaffordable for people living on low income. Living in homes and areas high levels of air pollution and low Indoor Environmental Quality also negatively impacts school and university performance ([273]), with consequences for lifelong earnings.

Affordable housing is also a crucial element in sustaining the social fabric and enhancing the overall quality of life. Affordable housing provides individuals and families with access to safe and adequate living conditions and fosters inclusivity and diversity within communities. By ensuring that housing options are accessible to people from various socio-economic backgrounds, affordable and good-quality housing help mitigate gentrification, segregation and the displacement of long-standing residents. It also promotes social stability and cohesion by allowing a mix of cultural, economic, and social groups to coexist and thrive, and support a social network where resources and opportunities can be shared more equitably. When considered in a broader context including services, public spaces, and green infrastructure that shape the character a lived environment, housing also contributes to improving neighbourhoods and communities.

The EU's outermost regions face specific housing challenges shaped by geography socio-economic indicators, and high exposure to extreme weather events and climate change. EU outermost regions (OR) are islands, archipelagos and land territories which are geographically very distant from the European continent but are part of the EU. They face key challenges in relation to access to adequate housing, particularly in terms of affordability. The French OR face great difficulties due to overcrowded dwellings and insufficient supply of social housing. In particular, French Guiana and Mayotte are witnessing strong demographic and urban growth as

([271]) Della Valle, N., Maduta, C., D'Agostino, D. and Koukoufikis, G., 'Unpacking energy vulnerability in the European Union: Linking thermal discomfort with adaptive capacity', Vol. 129, November 2025, 104376, https://data.europa.eu/doi/10.1016/j.erss.2025.104376; The study below highlights that Europe is the continent with the highest level of warming, and in the absence of an effective adaptive response, the continent will face an average of over 68,000 excess deaths each summer by 2030 and over 94,000 by 2040: Ballester, J., Quijal-Zamorano, M., Méndez Turrubiates, R.F. *et al.*, 'Heat-related mortality in Europe during the summer of 2022', *Nat Med* 29, 1857–1866, 2023, https://doi.org/10.1038/s41591-023-02419-z.
([272]) Koukoufikis, G., Roca Reina, J.C., Katoufa, N., Ozdemir, E., Volt, J., Carlsson, J., *Addressing Residential Cooling Demand and Summer Energy Poverty in the EU - Towards a Cooler Future*, Publications Office of the European Union, Luxembourg, 2025, JRC143288, forthcoming.
([273]) Saenen, N., Provost, E., Viaene, M., Vanpoucke, C, Lefebvre, W. et al, 'Recent versus chronic exposure to particulate matter air pollution in association with neurobehavioral performance in a panel study of primary schoolchildren', *Environment International*, vol. 95, 2016, pp. 112-119, https://doi.org/10.1016/j.envint.2016.07.014.

well as migratory pressure, posing greater challenges to adequate housing. The Portuguese OR and the Spanish Canary Islands are also affected by affordability and social housing challenges but face lower constraints in terms of infrastructure ([274]). Economic dependence on a narrow range of sectors (such as tourism or agriculture), combined with high poverty rates, amplifies demand for affordable and good-quality housing in OR regions. Due to their remoteness, the high transport and import costs increase construction costs, limiting the viability of new housing development, particularly social or affordable units. Moreover, the impact of climate change (including cyclones, coastal erosion, and rising sea levels) adds urgency to the need for resilient housing solutions ([275]).

7.2. Energy performance and decarbonisation

Low or zero-emission performance for new buildings and renovations reduce total costs over the lifetime of the building. Decarbonisation of the building stock requires low carbon solutions in design, material choice, construction and operation. Buildings operation is responsible for 40% of energy consumption and about one third of energy-related greenhouse gas emissions in the EU. Total greenhouse gas emissions from the sector, however, are higher, as the embodied greenhouse gas emissions from the building stock represent up to about a third of the operational ones ([276]). Energy efficiency standards are hardly new in Europe: they have existed in several Member States since the first oil crisis in the 1970s ([277]). Over the years those standards have gradually tightened and a common EU methodology to establish them has been introduced with the Energy Performance of Buildings Directive ([278]). Investments in energy efficiency, particularly if focused on measures such as the renovation of worst-performing buildings, can also help households

([274]) European Commission: Directorate-General for Regional and Urban Policy and ECORYS, *Study on living conditions and access to selected basic needs in the EU outermost regions – Final report*, 2024, Publications Office of the European Union, Luxembourg, https://data.europa.eu/doi/10.2776/185784.

([275]) European Commission: Directorate-General for Regional and Urban Policy and ECORYS, Study on living conditions and access to selected basic needs in the EU outermost regions – Final report, 2024, Publications Office of the European Union, Luxembourg, https://data.europa.eu/doi/10.2776/185784.

([276]) European Commission: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, BPIE, KU Leuven, Ramboll and TU Graz, *Analysis of life-cycle greenhouse gas emissions of EU buildings and construction – Analysis of results and implications*, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2873/2247112.

([277]) Economidou, M., Todeschi, V., Bertoldi, P., D`agostino, D., Zangheri, P. and Castellazzi, L., 'Review of 50 years of EU Energy Efficiency Policies for Buildings', *Energy and Buildings*, vol. 225, p. 110322, 2020 . https://doi.org/10.1016/j.enbuild.2020.110322.

([278]) The cost-optimal methodology outlined by the EPBD is a key tool used to identify the energy efficiency levels for new constructions and renovations, aiming to achieve the lowest costs over a 20–30-year calculation period. An overview of these levels in the EU Member States and associated costs is provided in: Zangheri, P., D`agostino, D., Armani, R. and Bertoldi, P., *Review of the cost-optimal methodology implementation in Member States in compliance with the Energy Performance of Buildings Directive*, BUILDINGS, ISSN 2075-5309, 12 (9), 2022, p. 1482, JRC121895, https://publications.jrc.ec.europa.eu/repository/handle/JRC121895.

achieve lower lifetime energy bills and better comfort while also reducing carbon emissions ([279]). Every euro invested in energy efficiency translates into 12 euros in savings on energy costs over the lifetime of the investment in housing ([280]). Improved insulation, renewable energy, and smart systems lower lifetime energy bills and enhance comfort. While the construction of a ZEB building might have higher initial costs, over a ZEB building's life, high-performance insulation, efficient heating and cooling, cheaper renewables and smart controls reduce energy use, so operating expenditures fall and exposure to energy-price volatility is moderated. Additional benefits for the inhabitants, beyond energy savings and lower energy bills, come through longer maintenance and replacement cycles and improved health and wellbeing.

7.3. Health, comfort and safety

Dampness and mould, poor indoor air quality from combustion and chemicals, and exposure to materials like lead and asbestos can cause health problems. Inadequate ventilation and pollutants from cooking, heating ([281]), space use or building materials contribute to indoor air pollution ([282]), with harmful substances such as carbon monoxide, nitrogen dioxide, and volatile organic compounds. Excess moisture can lead to mould growth, triggering allergies and asthma, while older homes may contain asbestos ([283]) and lead, posing respiratory or developmental risks. Radon, a radioactive gas, can infiltrate homes from the ground, potentially causing cancer. Physical hazards include extreme temperatures, which can cause dehydration or respiratory issues, and other risks encompass noise and inadequate acoustic insulation, which may lead to stress, inadequate sanitation contributing to infectious diseases, and overcrowding, which heightens stress and the likelihood of accidents and disease transmission.

([279]) Constructing Zero-Emission Buildings (ZEBs) requires a higher energy performance and no on-site carbon emissions from fossil fuels (for environmental impact of construction see section 2.3), and additional design, modelling and verification tasks compared with nearly nearly-zero energy buildings. See: European Commission, 'Nearly-zero energy and zero-emission buildings', European Commission website, accessed 10/12/25, https://energy.ec.europa.eu/topics/energy-efficiency/energy-performance-buildings/nearly-zero-energy-and-zero-emission-buildings_en.

([280]) Based on 27,000+ energy efficiency projects in EU27 in the DEEP database (see European Commission, 'De-risking Energy Efficiency Platform (DEEP)', European Commission: Directorate-General for Energy website, accessed 11/12/25, https://deep.ec.europa.eu/) and Eurostat electricity prices 2024 (see: European Commission: Eurostat, 'Statistics explained – Electricity price statistics', European Commission website, accessed 11/12/25, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics).

([281]) Fossil fuel and wood-based heating negatively impacts air quality, exposing the population to significant health risks.

([282]) European Public Health Alliance (EHPA), *Position Paper - Towards better indoor air quality in the European residential context*, 2024, https://epha.org/towards-better-indoor-air-quality-in-the-european-residential-context/.

([283]) Maduta, C., Kakoulaki, G., Zangheri, P. and Bavetta, M., *Towards energy efficient and asbestos-free dwellings through deep energy renovation*, EUR 31086 EN, Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/00828, JRC129218.

Housing is a key social determinant of health, and the lack of housing, housing insecurity or poor-quality housing has a negative effect on health and well-being of individuals and communities. People experiencing homelessness, housing inadequacy or housing insecurity ([284]) often also face increased exposure to environmental hazards and infectious diseases, and heightened levels of stress and mental health issues as well as disabilities ([285]). Access to quality housing is also a critical determinant of children's health and can influence development, weight, respiratory diseases and poor nutrition. In 2023, nearly 18% of children in Europe were living in housing with leaks, dampness or mould ([286]). Children exposed to substandard housing conditions are at increased risk of developmental delays and early health complications, including low birth weight and respiratory issues. Inadequate and unaffordable housing can lead to a range of physical health issues, including respiratory infections, asthma, and poor nutrition due to limited cooking facilities ([287]). These conditions also contribute to mental health challenges such as anxiety, depression, and chronic stress, especially when children experience housing instability or homelessness ([288]).

Housing safety refers to the conditions that safeguard the security, health, and well-being of its occupants by preventing hazards like structural collapse, fire, inadequate sanitation, and environmental threats. Housing safety involves ensuring adequate essential services (e.g. electricity, heating, and running water), while providing protection from weather conditions, structural problems, and other physical dangers. It also covers the prevention of injuries and illnesses arising from factors such as poor air quality, pest infestations, slips and falls, and exposure to harmful chemicals.

([284]) European Federation of National Organisations working with the Homeless (FEANTSA), 'European Typology of Homelessness and Housing Exclusion (ETHOS)', FEANTSA website, accessed 10/12/25, https://www.feantsa.org/files/Home/ETHOS/PDFS/ETHOS.pdf. For social consequences of housing unaffordability see section 2.1.

([285]) For more details about 'mutually reinforcing' relationships between long-term and repeated homelessness and addiction, mental illness and limiting illness and disability, see: European Platform on Combatting Homelessness, Nicholas Pleace, *Social and healthcare services for homeless people: A Discussion Paper,* 2023 https://webgate.ec.europa.eu/circabc-ewpp/ui/group/bab664d7-1188-47b2-9fa6-869902320ba2/library/0f041c0f-c44b-4504-8ab5-e1e2b6591113/details.

([286]) European Commission: Eurostat, EU Statistics on Income and Living Conditions (EU-SILC): 'Children (aged 0 to 17) living in a dwelling with a leaking roof, damp walls, floors or foundation', (ilc_mdho01c), 2023, accessed 10/12/25.

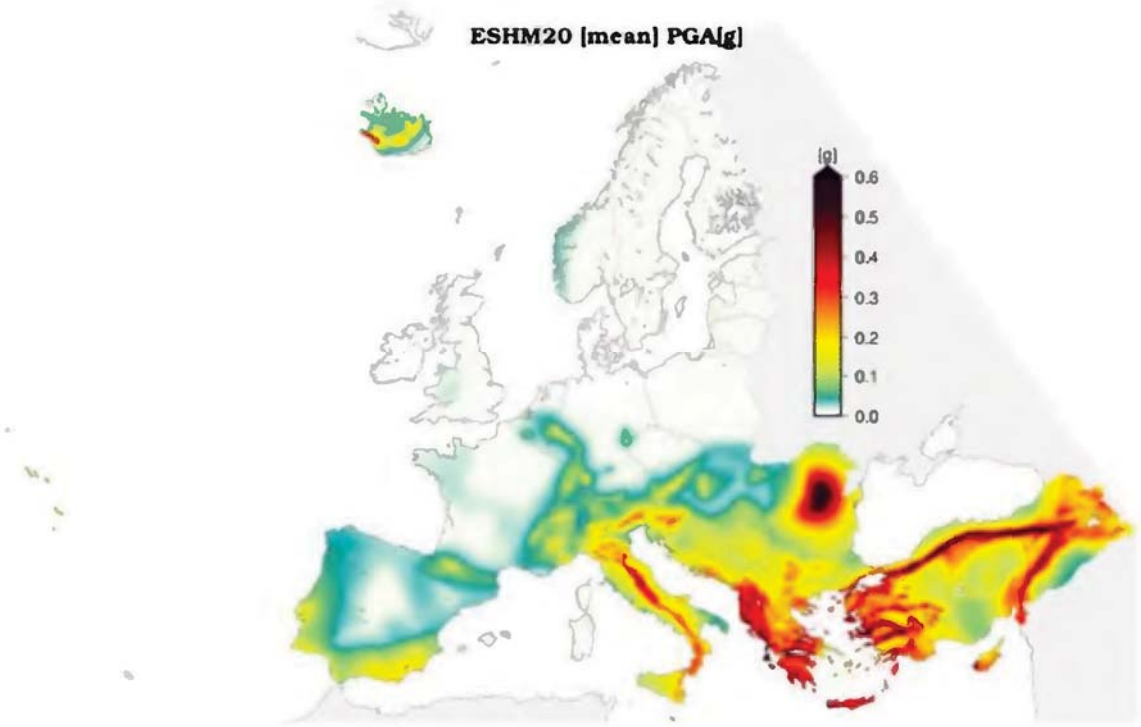
([287]) European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Culora, A. and Janta, B., *Understanding the housing conditions experienced by children in the EU*, Publications Office of the European Union, 2020, https://data.europa.eu/doi/10.2767/06450.

([288]) European Federation of National Organisations working with the Homeless (FEANTSA), *Children Facing Homelessness and Poor Housing. A European Reality,* 2024, https://www.feantsaresearch.org/en/report/2024/09/19/report-9th-overview-of-housing-exclusion-in-europe-2024.

Structural stability in the EU, where a significant portion of the building stock was not designed to resist seismic shocks, is a concern especially in South-Eastern European countries. Structural stability is the ability of a building to maintain its shape and resist deformation or collapse under the action of external loading, e.g. earthquakes, wind, snow and other environmental factors. With over 40% of the existing building stock in the EU being over 50 years old and approximately 70% of the residential building stock built before 1990 ([289]), a significant portion of the existing housing lacks modern design standards, including requirements for seismic safety. In this context, integrated renovation of buildings provides a unique opportunity to create a safe, sustainable and inclusive built environment ([290]).

Figure 45: The European Ground Shaking Hazard Map for a return period of 475 years

([289]) About 67% of the residential buildings floor area was built before 1990, see: European Commission, 'EU Building Stock Observatory (BSO) Database', European Commission, Directorate-General for Energy website, accessed 10/12/25, https://building-stock-observatory.energy.ec.europa.eu/database/.
([290]) European Commission: Joint Research Centre, Gkatzogias, K., Pohoryles, D., Romano, E., Bournas, D., Negro et al., *Integrated seismic and energy renovation of buildings*, JRC Science for Policy Report, Publications Office of the European Union, Luxembourg, 2023, https://data.europa.eu/doi/10.2760/346428.



Source: Danciu, L., Nandan, S., Reyes, C., Basili R., Weatherhill, G. et al., 2025.

Many residential buildings lack critical fire protection, resulting in fatalities. In the EU there are nearly 5,000 fire related casualties annually, mostly in domestic buildings ([291]) with electrically induced fires causing 1,000 to 1,200 fatalities and EUR 6.25 billion of property damage each year ([292]). Many residential buildings have outdated electrical systems ([293]), lack critical fire protection measures and include flammable materials, like untreated wood or plastics. Renovations do not necessarily include adequate fire safety measures; however, according to the latest building legislation major renovations should also address fire safety ([294]). Buildings catching fire can release effluents and by-products that contaminate the soil, the air and the groundwater as well as

([291]) European Fire Safety Alliance, 'Focus area 4 » Realize EU-wide data on residential fires', European Fire Safety Alliance, accessed 10/12/25, https://www.europeanfiresafetyalliance.org/action-plan/statistics/.
([292]) Forum for European Electrical Domestic Safety (FEEDS), *White Paper – Residential Electrical Safety: How to ensure progress*, 2020, https://www.feedsnet.org/wp-content/uploads/2023/01/FEEDS-report-202002.pdf.
([293]) Statistics from several European countries reveal that electrical fires account for 25-30% of all domestic fires in 2020, an increase of 5-10% since 2010. The total number of fires of electrical origin in the EU is estimated to be 273,000 per year, see FEEDS (see previous footnote).
([294]) Article 8(3) EPBD: Member States shall address, in relation to buildings undergoing major renovation, the issues of indoor environmental quality, adaptation to climate change, fire safety, risks related to intense seismic activity, the removal of hazardous substances including asbestos and accessibility for persons with disabilities.

threaten health and well-being ([295]). New technologies for the decarbonisation of buildings (e.g. photovoltaic panels, electric vehicle charging points, heat pumps, new materials for building envelopes) introduce increased loads and impacts on fire dynamics. Fire safety engineering can improve the reliability and cost-effectiveness of fire safety measures for buildings and opens the possibility of integrating innovative solutions ([296]).

7.4. Social dimension of housing

There is a strong connection between social issues and housing. On one hand, social problems (e.g. job precariousness, discrimination, poverty) can lead to housing difficulties, so tackling these issues can help prevent or alleviate housing-related challenges. On the other hand, housing initiatives have the potential to contribute positively to society by addressing broader issues, since housing and the built environment in general are preconditions for social inclusion. Therefore cities, regions, and housing developers can use the knowledge about these connections to deliver high quality housing with added social value.

When new housing units are built or existing buildings are renovated, considering the social dimension of housing in order to create liveable neighbourhoods with an added social value is key. The housing affordability crisis should not be addressed by providing cheap housing in non-well-connected areas that lack the necessary (social) infrastructure and services and does not meet high quality living standards. This could result in the development of segregated neighbourhoods that are virtually service deserts, besides being counterproductive to work-life balance of workers. In practice, this means allowing for people with different income levels and socio-demographic characteristics to live in the same area and/or the same building ("mixity" instead of segregated housing / segregated neighbourhoods). Considering all these dimensions leads to housing quality in a wider sense and enable municipalities and housing organisations to also provide/forecast and organise housing policies and the necessary integrated services (e.g. social/care services, local infrastructure, shops, transport) to create liveable neighbourhoods.

7.5. Climate mitigation, adaptation and resilience

Climate change has an impact on livelihoods and housing markets, as floods and other natural disasters damage properties. In many cities, areas at risk of indoor overheating and

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([295]) Lancashire University's analysis of soil, char and debris samples from local area after the Grenfell Tower fire reveals considerable concentrations of toxicants from the fire with an increased risk of health problems to those in the local area, from asthma to cancer, see: Stec, A., Dickens, K., Barnes, J. and Bedford, C., 'Environmental contamination following the Grenfell Tower fire', *Chemosphere*, vol. 226, 2019, pp. 576-586, https://doi.org/10.1016/j.chemosphere.2019.03.153.

([296]) Sciarretta, F., Athanasopoulou, A., Polo Lopez, C.S., Tsionis, G., Debrouwere, B. et al., *Prospects for implementation of Fire Safety Engineering approach in Europe – Support to policies and standards for sustainable construction ecosystem*, JRC143347 , Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/133523.

urban heat island (UHI) effect often coincide with areas with a high concentration of people in vulnerable situations ([297]). In addition, currently around 53 million people (12% of Europe's population) live in areas potentially prone to flooding. This number increased by 935,000 between 2011 and 2021, showing continuous development on floodplains ([298]). Urban areas in Europe are expected to be exposed to higher risks due to pluvial flooding, heat, urban landslide, heavy hailstorms and intense droughts ([299]). Lack of accessibility including to emergency preparedness and response measures increases the risk for persons with disabilities and older persons. In rural areas, climate change can also severely impact housing, as older rural homes are often less resilient to floods, storms, heatwaves, or droughts and people exposed to a risk of poverty or social exclusion dispose of fewer resources to adapt or recover ([300]).

In recent years, a series of floods happened across Europe, taking lives and damaging property. In July 2021, the German states of North Rhine-Westphalia and Rhineland-Palatinate experienced floods which affected tens of thousands of people, caused 196 fatalities and had an economic impact of over EUR 30 billion ([301]). In Belgium, in the same year, summer floods caused catastrophic damage, including 43 fatalities, over 45,000 damaged homes, and significant

([297]) Heat-related deaths have increased by 304% in the EU between 2000 and 2020. See Copernicus, 'European State of the Climate Report 2023', Copernicus website, accessed 05/12/25, https://climate.copernicus.eu/esotc/2023.

([298]) European Environment Agency (EEA), 'Climate health risks posed by floods, droughts and water quality call for urgent action', EEA website, 15/05/24, accessed 05/12/25, https://www.eea.europa.eu/en/newsroom/news/climate-health-risks-posed-by-floods.

([299]) European Environment Agency (EEA), 'Chapter 9. Built environment', in: European Environment Agency (EEA), *European Climate Riks Assessment (EUCRA),* 2024, https://www.eea.europa.eu/en/analysis/publications/european-climate-risk-assessment.

([300]) Rural observatory, 'Persons at risk of poverty or social exclusion', European Commission website, accessed 05/12/25, https://observatory.rural-vision.europa.eu/rural-focus?lng=en&ctx=ROBS&ts=ROBS&is=Default&tl=0&i=58&dblts=98&cl=rural&clc=social-20inclusion&db=1148&it=ranking-chart&pil=indicator-level&date=2020&trc=DEGURB3&tv=2021&cwt=line-chart.

([301]) European Union Civil Protection Knowledge Network, 'German Committee for Disaster Risk Reduction: Report on 2021 floods', European Commission: Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO) website, 19/07/24, accessed 10/12/25, https://civil-protection-knowledge-network.europa.eu/stories/german-committee-disaster-risk-reduction-report-2021-floods#:~:text=On%202021%20Floods-,German%20Committee%20for%20Disaster%20Risk%20Reduction:%20Report%20on%202021%20floods,the%20floods%20in%2.

infrastructure destruction ([302]). The floods in Emilia-Romagna in May 2023 ([303]) caused 17 fatalities and 36,600 displaced persons at its peak ([304]). In August of the same year, two-thirds of Slovenia was flooded, leading to the evacuation of 8,000 individuals and the loss of six lives. In September, record-breaking rainfall and flooding hit Greece (17 casualties) and Bulgaria (four casualties) ([305]). Around 700 square kilometres of Greek territory were flooded, with some areas receiving an average yearly rainfall in just one day ([306]). 2024 saw the most widespread flooding since 2013, with river flows in 30% of the European river network exceeding the 'high' flood threshold and 12% exceeding the 'severe' flood threshold ([307]). In the Valencia region in Spain, 229 lives were lost after catastrophic floods in October 2024, with many homes inundated with floodwaters, leading to structural damage and contamination from hazardous substances that seeped into the ground. 3906 buildings and more than 60,000 people were impacted ([308]).

Climate change mitigation and adaptation measures improve long-term affordability, sustainability and quality of housing. Climate-resilient ([309]), highly energy-efficient and

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([302]) Copernicus 'ESOTC 2021 – Flooding in Europe', Copernicus Website, accessed 10/12/25, https://climate.copernicus.eu/esotc/2021/flooding-july.

([303]) The Emilia-Romagna region was affected by two consecutive events in less than twenty days (on May 2-3 and May 15-17), with cumulative monthly rainfall exceeding 450 millimetres in various locations. See: Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA), 'Alluvione in Emilia-Romagna: piogge record, fiumi e corsi d'acqua esondati', ISPRA website, accessed 05/12/25, https://www.isprambiente.gov.it/it/archivio/notizie-e-novita-normative/notizie-ispra/2023/05/maltempo-in-emilia-romagna-piogge-record-fiumi-e-corsi-dacqua-esondati.

([304]) They were temporary housed in 54 emergency reception centres (set up in gyms, schools, civic centres and convents) and 52 accommodation facilities or hosted by family members. Some of them had to wait months before being able to return to their homes, which were heavily damaged and had to undergo substantial renovations all while remaining in flood-prone areas. See: Regione Emilia-Romagna, 'Rapporto della Commissione tecnico-scientifica', Regiona Emilia-Romagna website, 18/04/24, accessed 10/12/25, https://www.regione.emilia-romagna.it/alluvione/rapporto-della-commissione-tecnico-scientifica.

([305]) Turkey was also hit (8 casualties).

([306]) Copernicus, 'Observer: ESOTC 2023 - Europe experienced an extraordinary year of extremes with record-breaking heatwaves, wildfires, floods, and drought', Copernicus website, 23/05/24, accessed 05/12/25, https://www.copernicus.eu/en/news/news/observer-esotc-2023-europe-experienced-extraordinary-year-extremes-record-breaking#:~:text=In%202023%2C%20Europe%20faced%20many,tragically%20resulted%20in%2015%20deaths.

([307]) Copernicus, 'European State of the Climate/2024/Flooding', Copernicus website, accessed 05/12/25, https://climate.copernicus.eu/esotc/2024/flooding.

([308]) European Space Agency (ESA), 'Devastating floods in Spain witnessed by satellites', ESA website, 05/11/24, accessed 05/12/24, https://www.esa.int/Applications/Observing_the_Earth/Devastating_floods_in_Spain_witnessed_by_satellites.

([309]) In the building sector, the term 'climate resilience' means that buildings should be planned, designed, built and operated in a way that anticipates, prepares for, and adapts to changing climate conditions. They should also be able to withstand, respond to, and recover rapidly from disruptions caused by these climate conditions.

decarbonised buildings are able to withstand slow-onset climate change as well as extreme weather events, reducing potential reconstruction, repair and adaptation costs. Such buildings can withstand, respond to, and recover rapidly from climatic disruptions through several measures, such as improved design, better insulation and efficient shading systems and green roofs (see below for nature-based solutions). In the construction sector, 'resilience' starts with planning and design in a way that anticipates, prepares for, and adapts to changing climate conditions ([310]). Financial incentives for climate neutral and energy efficient investments can encourage the adoption of sustainable practices. Effective risk mitigation involves incorporating climate resilience into housing policies and urban planning, ensuring that affordable housing developments are not disproportionately located in high-risk areas. Enhancing infrastructure, improving building standards, and integrating nature-based solutions strengthen resilience against climate impacts but are usually competing with an increasing pressure to reduce costs of construction.

Climate-related risks are progressively integrated into property values with potential macroeconomic consequences on housing affordability and households' wealth. The potential impact of climate change on real estate prices in vulnerable areas derives from the various risks (e.g. likelihood of future climate-related incidents) and their direct damage to properties ([311]). Property owners in risky areas face higher operating costs due to increased insurance costs ([312]), need for climate-resilient infrastructure (e.g. sea walls, cooling systems) and higher utility costs. In areas at high risk of climate related events, insurers are increasingly restricting coverage or raising premiums, creating or aggravating issues of affordability ([313]) with possible

([310]) The second generation of Eurocodes considers future impacts of climate change in the definition of climatic actions (e.g. snow, wind, temperature) for the structural design of buildings and civil engineering works. Access to datasets, models and guidance for the development of maps of climatic actions, and their cross-border harmonisation, are valuable to support informed decision-making and effective adaptation planning. See The second generation of Eurocodes considers future impacts of climate change in the definition of climatic actions (e.g. snow, wind, temperature) for the structural design of buildings and civil engineering works. Access to datasets, models and guidance for the development of maps of climatic actions, and their cross-border harmonisation, are valuable to support informed decision-making and effective adaptation planning.

([311]) Contat, J., C. Hopkins, L. Mejia and M. Suandi, 'When climate meets real estate: A survey of the Literature', *Real Estate Economics*, Vol. 52, pp. 618–659, 2024, https://doi.org/10.1111/1540-6229.12489; Trautmann, C., *Climate Change and Real Estate Prices: a Review of Physical and Transition Factors*, 2024, http://dx.doi.org/10.2139/ssrn.4720815.

([312]) Rising insurance costs and, in some cases, the withdrawal of insurance coverage in high-risk areas are making it more expensive or even impossible to protect and finance certain properties.

([313]) European Insurance and Occupational Pensions Authority (EIOPA) is concerned that affordability and insurability of natural catastrophes insurance coverage is likely to become an increasing concern. Currently, only 35% of the total losses caused by extreme weather and climate-related events across Europe are insured, and only 56% of damage caused by meteorological events (e.g. hurricanes and storm surges). For hydrological events (e.g. landslides and floods), the coverage falls to 28% and for climatological events (e.g. extreme temperatures, droughts and wildfires) just 7%. See: European Insurance and Occupational

macroeconomic spillovers where widespread devaluations or uninsured losses could negatively affect household wealth, credit quality and potentially prompt public intervention to stabilise affected markets.

Climate change increasingly influences population movement and housing conditions across Europe, disrupting economic activities and causing the displacement of communities. Slow-onset climate change as well as more frequent and severe extreme climate events not only threaten infrastructure and the natural environment, but they also disrupt urban settlements and exacerbate existing vulnerabilities. Communities exposed to increasing floods, rising sea levels, or persistent droughts often have limited choice but to relocate. Such shifts necessitate rapid adaptation of urban infrastructure and housing, which can strain already limited resources and exacerbate existing housing shortages.

Nature-based solutions (NbS) can strengthen the link between affordability, sustainability and quality. While NbS such as green roofs or permeable surfaces might increase upfront costs they can be contained if incorporated at an early stage in the design and construction. Specialised materials and expertise and handling approval processes and public procurement procedures can increase the complexity and the decision-making time. NbS can increase the attractiveness and viability of urban areas through improved quality of life, better air quality, aesthetics, and recreation spaces. They can also lead to cost savings in the long term through reduced expenses on management, maintenance, and energy efficiency, and improved building longevity [314] by enhancing the resilience of infrastructure to extreme weather and reducing the urban heat island effect[315]. Traditional building techniques and materials such as clay, wood and stone can also contribute to the climate resilience and durability of buildings.

7.6. Sustainable infrastructure

Pensions Authority (EIOPA), *The pilot dashboard on insurance protection gap for natural catastrophes in a nutshell, EIOPA-BoS-20/663*, Publications Office of the European Union, Luxembourg, 2020, https://www.eiopa.europa.eu/system/files/2020-12/the_pilot_dashboard_on_insurance_protection_gap_for_natural_catastrophes_in_a_nutshell.pdf;
European Insurance and Occupational Pensions Authority (EIOPA), *Climate change, catastrophes and the macroeconomic benefits of insurance, Publications Office of the European Union,* Luxembourg, 2021, https://www.eiopa.europa.eu/system/files/2021-07/thematic-article-climate-change-july-2021.pdf.

([314]) For example, green roofs increase insulation, reducing cost of heating (in winter) and cooling (in summer) and bitumen basis layers are less exposed to sun and wind and therefore have a longer lifespan, leading to less costs of replacing it after weathering.

([315]) Mihalakakou, G., Souliotis, M., Papadaki, M., Menounou, P., Dimopoulos, P. et al., 'Green roofs as a nature-based solution for improving urban sustainability: Progress and perspectives', *Renewable and Sustainable Energy Reviews*, Volume 180, July 2023, 113306, https://doi.org/10.1016/j.rser.2023.113306.

The development and efficiency of basic infrastructure (such as grids and utilities, water and sewage systems, transportation networks, and digital access) are crucial components in the affordability, sustainability and quality of housing. Connection to basic infrastructure is integral to housing supply. Access to reliable grids and utilities, such as electricity, gas, water and sewage, is fundamental to the functionality of any housing unit. It influences the choice of where to live. The presence of infrastructure enables people to move out of more expensive cities and ensures that homes are economically viable for residents. Infrastructure accessibility and efficiency directly impact both the upfront cost of housing development and ongoing living expenses, thereby influencing overall affordability. For example, in the Netherlands, widespread grid congestion has led to delays in obtaining grid connections for both new housing and renovation projects, as well as for the installation of heat pumps, EV chargers or rooftop PV ([316]). This is causing delays in residential construction and is restricting housing supply in some regions ([317]). Efficient water and sewage systems minimise waste and service disruptions, ensuring consistent access to clean water. When these infrastructures are inadequate or require expensive upgrades, the costs are often passed on to homeowners or renters, impacting housing affordability. Similarly, adequate transport networks, including roads, public transport, and cycling paths, influence the economic viability of housing areas by improving access to employment opportunities, education, healthcare, and other essential services. Housing situated in well-connected areas tends to be more desirable and can drive up property values. Conversely, inadequate transport options can isolate communities, leading to higher travel and total housing costs and reducing economic opportunities for residents, disproportionately affecting low-income households.

Limited availability and unaffordability of good-quality housing in economic hubs pushes workers toward peripheral areas. In Europe, metropolitan regions are typically the most expensive. Rising housing costs in these areas reduce access for lower and middle-income households and drive gentrification, heightening risks of exclusion and instability ([318]). Commuting accounts for substantial daily travel time and emissions and involves regularly car-

([316]) Currently, grid connections are usually granted based on a first-come-first-serve approach, which results in speculative requests (before construction), further straining grid capacity.
([317]) European Commission: Directorate-General for Economic and Financial Affairs, *In-Depth Review 2024 – The Netherlands*, Publications Office of the European Union, Luxembourg, 2024, https://economy-finance.ec.europa.eu/document/download/1ec6be97-481e-4340-833c-ae4cbf1f617e_en?filename=ip274_en.pdf.
([318]) OECD *Housing and Inclusive Growth*, OECD Publishing, Paris, 2020, https://doi.org/10.1787/6ef36f4b-en; Aurambout, J.-P., Baranzelli, C., Siragusa, A., and Vandecasteele, I. (eds), *The future of cities – Opportunities, challenges and the way forward, Science for Policy Report by the European Commision: Joint Research Centre* Publications Office, Luxembourg 2019, https://data.europa.eu/doi/10.2760/375209.

dependent commute ([319]). Long commutes intensify congestion in and around hubs, weighing on productivity, exposure to air pollution ([320]), well-being and urban liveability ([321]). An adequate transport network that provides reasonable commuting options offers a broader set of affordable and quality housing options, supporting labour mobility and labour-market participation. This in turn contributes to reducing poverty, higher productivity and a more efficient allocation of skills across regions.

([319]) Blumenberg, E., Siddiq, F., 'Commute distance and jobs-housing fit', *Transportation2023;50(3)*, 2023, pp.869-891, doi: 10.1007/s11116-022-10264-1; European Commission: Eurostat, 'Statistics Explained', Main place of work and commuting time – statistics, European Commission website, accessed 05/12/25.

([320]) European Topic Centre on Air Pollution and Climate Change Mitigation, Karanasiou, A., Viana, M., Querol, X., Moreno, T. and de Leeuw, F., *Assessment of population exposure to air pollution during commuting in European cities*, ETC/ACM Technical Paper 2013/2, 2013, eionet.europa.eu/etcs/etc-atni/products/etc-atni-reports/etcacm_tp_2013_2_pop_exp_commut_cities/@@download/file/ETCACM_TP_2013_2_pop_exp_commut_cities.pdf.

([321]) OECD and European Conference of Ministers of Transport (ECMT), *Managing urban traffic congestion,* OECD Publishing, Paris, 2007, https://www.oecd.org/content/dam/oecd/en/publications/reports/2007/05/managing-urban-traffic-congestion_g1gh7edf/9789282101506-en.pdf.

8. LIST OF TABLES AND FIGURES

9. ANNEX: SYNOPSIS REPORT

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