



European Construction Sector Observatory

Housing affordability and sustainability in the EU

Analytical Report

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List of acronyms

ARA	Finish Housing Finance and Development Centre
BIM	Building Information Modelling
CEB	Council of Europe Development Bank
DTI	Debt to Income
ECB	European Central Bank
ECSCO	European Construction Sector Observatory
EFSD	European Fund for Strategic Investments
EIB	European Investment Bank
EPSR	European Pillar of Social Rights
ERDF	European Regional Development Fund
HPAP	Housing Partnership Action Plan
HPE	High Energy Performance
LTV	Loan to Value
MS	Member State(s)
NAMC	Hungary National Asset Management Company
OECD	Organisation for Economic Co-operation and Development
RES	Renewable Energy Systems
SDG	Sustainable Developments Goals
SHDF	State Housing Development Fund
SIB	Social Impact Bonds
SZRB	Slovak Guarantee and Development Bank
THPE	Very High Energy Performance
UN	United Nations
URBACT	European Territorial Cooperation Programme
US	United States
VAT	Value Added Tax
WSW	Social Housing Guarantee in the Netherlands

Executive Summary

This analytical report is part of the European Construction Sector Observatory (ECSO) and aims to provide policy insights as well as highlight a set of evidence-based lessons learnt for policy-makers on how to support housing affordability and sustainability. The report hence offers an overview of the state of play in terms of housing market situation, affordability and sustainability, based on national and city level statistical data, comparable across the EU. Some of the key drivers and obstacles around housing affordability – whether related to the regulatory and financing landscapes, or horizontal issues (including transport, sustainable urban planning and energy) are then identified and analysed. Once the housing affordability and sustainability landscape is drawn, the study dives into the relevant policy initiatives, touching upon housing affordability and sustainability. In doing so, it aims to highlight best practices, while illustrating potential implementation drivers and obstacles. Finally, the report offers a set of lessons learnt, based on the performed analysis.

State of housing affordability and sustainability across the EU

Housing becomes more expensive across Europe, with house price index rising in most of the European countries. This is especially the case of urban areas, which host about two thirds of Europeans.

Growing population and urbanisation trends create in turn a need for additional housing. With an ageing EU building stock, considerations regarding the quality of living space also arise.

While incomes are also growing overall, further considerations are due to understand what these market characteristics mean for the future development of European cities and housing, especially in terms of affordability.

Housing affordability is hence a growing issue in the EU. Housing and inequality are linked, with homes making up the largest share of wealth across developed economies. At the same time, housing cost overburden and the quality of living conditions become increasingly prominent issues. Understanding these indicators, requires looking beyond the total and the average, as break downs by area and income paint a different picture.

Households at the bottom 60% of the income distribution and living in urban areas are disproportionately affected by affordability issues and have a lower quality of life. Viewing households within an affordability continuum can help target and design drivers in public policies to ultimately improve living conditions in an inclusive and sustainable way.

Drivers of housing affordability and sustainability across the EU

The report identifies and analyses some of the key drivers of housing affordability, ranging from sustainable urban planning policies, to economic factors – including monetary and fiscal measures and financing instruments, and market related factors (such as the potential improvement of the productivity of the construction sector).

Governments are increasingly recognising the links between sustainability and housing, notably through the two following concepts: material sustainability and housing as a part of urban development. Material sustainability, refers to a sustainable (and circular) system, focused on reducing the use of primary sources, generating savings and reducing negative environmental impacts. Housing as part of (sustainable) urban development refers to housing policies that ensure a “better quality of life for everyone” and involves “economic, social and environmental considerations in ways that mutually reinforce each other”. Both these approaches, by following an integrated and holistic model, also favour the development of housing affordability and hence access to safe, decent and affordable home for everyone.

Next to policy drivers, economic drivers, including monetary and fiscal measures, but also financial instruments play a key role in supporting the development of housing affordability. In terms of monetary measures, the report pays specific attention to two aspects: mortgage rates and credit conditions.



Interest rates can be used to correct steep increases in housing prices, when this threatens the economic and financial stability. Combined with regulations, such as tightening of credit conditions, for instance, changes inform investor expectations regarding further price developments.

In addition, while lower mortgage rates make it cheaper for households (and investors) to invest in housing, they also boost housing demand. This has two main effects: i) lower mortgage rates increase house price volatility; and ii) because of increasing demand, house prices increase, thus undermining housing affordability.

The fiscal measures highlighted in this report relate to energy efficiency and rental policies – both affecting housing affordability and sustainability. The report shows that fiscal measures fostering energy efficiency, as promoted by EU member states, can help address housing affordability by lowering energy bills and thus tackling energy poverty. In some cases, however, a trade-off exists, for instance between increasing rents after renovations and reduced energy bills.

Fiscal measures for energy efficiency have the potential to improve affordability, especially for low-income households, who often live in older building stock of lower quality. In parallel, fiscal measures for rental policies are often implemented to boost the rental supply, which is one of the key determinants for housing affordability. This type of schemes may include incentives for owners to rent their vacant properties, increasing taxes on vacant and second properties, or fiscal policies targeting vacant units.

EU governments have also put in place a number of financial instruments to foster housing affordability. These can take the form of affordable home ownership schemes (such as shared equity loans), targeting first time home-buyers and people, who do not have a substantial deposit saved for a market-rate mortgage. In parallel, while governments decreased their investments in social infrastructures, key players such as the European Investment Bank are actively funding housing affordability and sustainability.

Other player such as the city of Vienna put in place innovative financing mechanisms (housing fund) to support the development of affordable housing, but also governments have put in place social impact bonds.

Last, another driver for housing affordability may come from the integration of digital technologies in the construction sector. This would in turn optimise resources, which would help in providing relatively lower cost housing.

Obstacles to housing affordability and sustainability across the EU

A number of factors help explain why the issue of housing affordability is growing in Europe and European cities, and is exacerbating societal division and limiting social and economic mobility. The most obvious one is the urbanisation pressure, whereby cities, as economic growth centres, keep attracting more and more (skilled) workers. In turn, house prices in urban areas (which are already high) increase, often faster than household's disposable income, thus nurturing housing affordability issue. Further, trends such as the emergence of the digital and the sharing economy (e.g. Airbnb), the globalisation of labour, among others, play a role. Examples for their impact could be seen across MS, with, for instance, rents in the central quarters of cities like Lisbon skyrocketing due to dwellings being used for short term rentals. In Brussels, international workers with higher salaries than local earners raise housing market prices, making it hard for locals to afford.

Governments can boost housing supply to support housing affordability. The report hence looks at some of the state regulations of the housing market (rental regulations, land use, ease of registering property etc.) that partly determine the capacity of the state to boost housing supply.

Issues regarding the coordination of different government levels (from European, national, to regional and local) are also looked at, as they also undermine addressing the housing affordability and sustainability issue.

Last, it highlights the fact that political economy dynamics largely shape housing policy and may act as a potential blocker when it comes to boosting affordable housing.

From a market perspective, other obstacles such as the lack of financing in housing affordability, coupled with increasing construction costs and the lack of land, are also among the factors that prevent the development of affordable housing. Last, the report shows that housing affordability cannot be seen in isolation from energy and transport costs. For example, the latter account for 13.0% of households' expenditure in Europe – and this average may be even higher in a specific context (such as peri-urban areas). In other words, addressing housing affordability also means taking account of, and lowering transport and energy costs – which are significant challenges by themselves. This issue is linked to gentrification in the city centres, causing residents to look for more affordable dwellings further away from the centre and possibly from their place of work. If residents are able to afford staying close to the centres and their work, this would minimise commuting costs and times, therefore also lowering the city's environmental footprint. This is also part the overall sustainable development endeavour – improving energy efficiency and resource use, quality of life of EU citizens and supporting economic development and job creation.

Policy initiatives

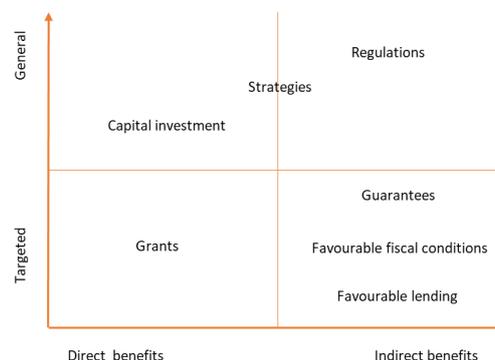
Member States have introduced a variety of policy instruments, schemes and initiatives in order to address obstacles to affordable housing and sustainability.

Policy responses regarding housing affordability fall into four main categories:

1. Policies favouring the acquisition of affordable housing, targeting home owners and home buyers;
2. Policies aiming at promoting rentals of affordable housing;
3. Policies impacting the housing supply by investing in the construction of social housing;
4. Housing allowances for economically deprived households are granted, mainly implemented through direct subsidies and often directed to specific group of persons or communities such as elderly, homeless people, migrants or ethnic communities, such as the Roma.

To support the realisation of each of these objectives, policy-makers make use of several complementary tools and approaches. These range from regulatory policies and strategies, fiscal measures such as tax incentives, financing instruments including loans, grants and guarantees, and capital investments. This set of tools is split into two categories: direct policies for those tools providing allocated paid amounts; whereas indirect policies refer to favourable conditions themselves providing economic advantages for individuals.

Analysis confirms that policies facilitating access to affordable housing for home owners and home buyers are the most popular in EU member states in comparison to the three other categories presented above. They are mostly supported through fiscal measures and financing instruments – mostly loans at favourable conditions.



However, even though lending and fiscal policies are the most commonly used policies for home ownership, the analysis reveals that these instruments may not be appropriate for lower income quintiles. In fact, policies and tools providing direct benefits for (affordable) home ownership support lower income quintiles.

The report also highlights the need to coordinate these measures and instruments in a coherent way to maximise synergies and complementarity.

Rental housing policies are more progressive and therefore enable to also target the lower quintile of the income distribution. Policy-makers support affordable rental housing in two ways. They can help compensate rental market prices with direct subsidies, by setting a limit of rental price per square meter and/or to promote the funding of rental constructions.

Grants and capital investment are some of the key tools they use in doing so, showing that indirect benefits policies are less used (in comparison to affordable home ownership and home buyer policies). Most of the grant schemes applied criteria including households’ income, overburden cost rate or specific age category (young or elderly).

The two last categories of policies (i.e. social housing policies and housing allowance), are targeting lower income quintiles and are therefore mainly constituted of direct benefits policies, with an important majority of policies promoting funding in dwellings. Therefore, capital investment is the most commonly used measure to promote access to affordable housing, whereas housing allowance policies are mostly supported by grants. There the public sector plays a key role, and financing mechanism to attract private sector investments (e.g. guarantees) are rarely used. Grant allocations often target homeless, elderly, disadvantages beneficiaries, disabled individuals, war veterans with disabilities or really low income earners.

Policy responses regarding sustainable urban planning and housing fall into the following two main categories:

1. Environmental dimension: environmental protection including energy efficiency, climate adaptation and renewable energy
2. Social inclusion and cultural consideration

Both of these categories are part of spatial planning, which takes into account complex socio-economic and environmental challenges.

	National	Regional	Neighbourhood
Environmental dimension	Setting the direction for sustainable construction practices, integrating housing into climate mitigation and adaptation efforts.	Ensuring high quality of life in urban areas with accessible and low-carbon infrastructure, green areas and sound waste management.	Ensuring resource efficiency and improving homes.
Social and cultural dimensions	Recognising housing as a human right and ensuring access to decent sustainable homes for all, incl. disadvantaged groups; Protecting cultural heritage and promoting the link between housing and cultural economies.	Regenerating areas and providing infrastructural integration of housing to the wider areas of cities; Protecting city’s cultural identity by preventing unnecessary gentrification, promoting urban culture and aesthetic public spaces.	Empowering people and ensuring public participation and a sense of community by designing public spaces to be inclusive; Promoting affordable sports, leisure and cultural facilities, supporting the cultural diversity.

In terms of environmental protection, this report shows that several schemes are in place to maximise energy efficiency and the use of renewable energy – including both fiscal measures and financing

instruments. This is partly explained by the higher level of maturity of this field and the involvement of private sector actors and (development) finance institutions.

Policies focusing on social inclusion aim to bridge social divides in societies, create mixed communities and promote integration and social justice by including housing for minority groups into social housing ecosystems.

These policies target vulnerable and disadvantaged social groups (e.g. elderly people, disabled people, ethnic minorities etc.). This is done through the use of grants and the development of strategies and action plans. However, more policy efforts are needed to address the issues of social inclusion in housing.

The use of vacant buildings is an important aspect of providing solutions for rising housing demand. Re-using and regenerating housing resources pertains to the principles of circular economy, climate mitigation and environmental protection and could be employed to serve social and cultural inclusion. In 2014, the number of vacant homes in the EU was estimated to be around 11 million¹.

Last, urban transportation and regeneration policies increasingly involve a holistic approach. There several financing mechanisms such as the JESSICA Holding Fund - Joint European Support for Sustainable Investment in City Areas supports sustainable urban development and regeneration through financial engineering mechanisms. This idea is hence to leverage on public resources to attract private investments. Several tools are hence used – such as loans and guarantees to foster the development of sustainable cities, and sustainable urban planning.

Lessons learnt

To support the provision of affordable housing, policy-makers focus their efforts on addressing a mix of issues, including the regulatory and institutional environment, financing landscape and sustainable urban planning

In this context, the report argues the following:

1. Policy-makers need to embrace (and deal with) the complexity around housing affordability.
2. Policy-makers should approach housing affordability from a long-term perspective, and aim for continual (and gradual) changes.
3. Policy-makers at national and local levels need to collaborate and coordinate more effectively.
4. Policy-makers and stakeholders aiming to foster housing affordability need to think and work politically – housing affordability is not only a technical issue.
5. Governments need to invest in housing affordability, using smart and effective financing instruments.
6. Policy-makers need to boost supply, in particular by promoting the reuse of vacant housing and brownfield redevelopment.
7. Social, environmental and economic sustainability are part of the solution around housing affordability.

¹ The Guardian, Scandal of Europe's 11m empty homes, <https://www.theguardian.com/society/2014/feb/23/europe-11m-empty-properties-enough-house-homeless-continent-twice>

1. Introduction

The crucial role housing plays in promoting social cohesion is widely recognised, with adequate housing affirmed as a universal right². This also echoes the Universal Declaration of Human Rights (1948)³ and the Charter of Fundamental Rights of the European Union (2012, article 34(3)), which recognises housing assistance as a right for those who lack sufficient means.

Affordable housing is generally understood as social housing, affordable rental housing and affordable home ownership, provided to eligible households whose needs are not met by the market - i.e. those belonging to the first three quintile of the population (see Figure 1).

However, definitions and way to calculate housing affordability tend to vary. In Europe, housing affordability is often defined by using the housing cost overburden rate, i.e. the percentage of the population living in households where the total housing costs represent more than 40% of disposable income (Eurostat definition). This approach is also followed by the OECD in one of their recent studies on affordable housing. In the US and Australia, a 30% threshold is applied⁴. The Global Housing Watch takes a slightly different approach, considering affordable housing any house with a house-price-to-annual household income ratio of 3.0⁵. As this report focuses on the EU 28, it will follow the definition adopted by Eurostat and the OECD. In addition, we use the terms affordable housing and housing affordability interchangeably.

In line with the discussions on income (in)equality, the literature on housing affordability, has increasingly linked the concept (and so the housing cost overburden) with the income quintiles⁶. This is based on the argument that households in the bottom income quintiles are more likely to face issues of housing affordability than those in the top quintiles. Therefore, distinguishing between income quintile may help in highlighting with more precision who suffers most from housing affordability and to which extent. The Housing Partnership⁷, which is one of the main European initiatives when it comes to housing affordability, also follows this approach (as illustrated in Figure 1). It is also a working concept for a number of housing organisations, prominent in Anglo-Saxon countries⁸.

² European Parliament (2013), Social Housing in the EU. IP/A/EMPL/NT/2012-07

³ See Article 25: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services"

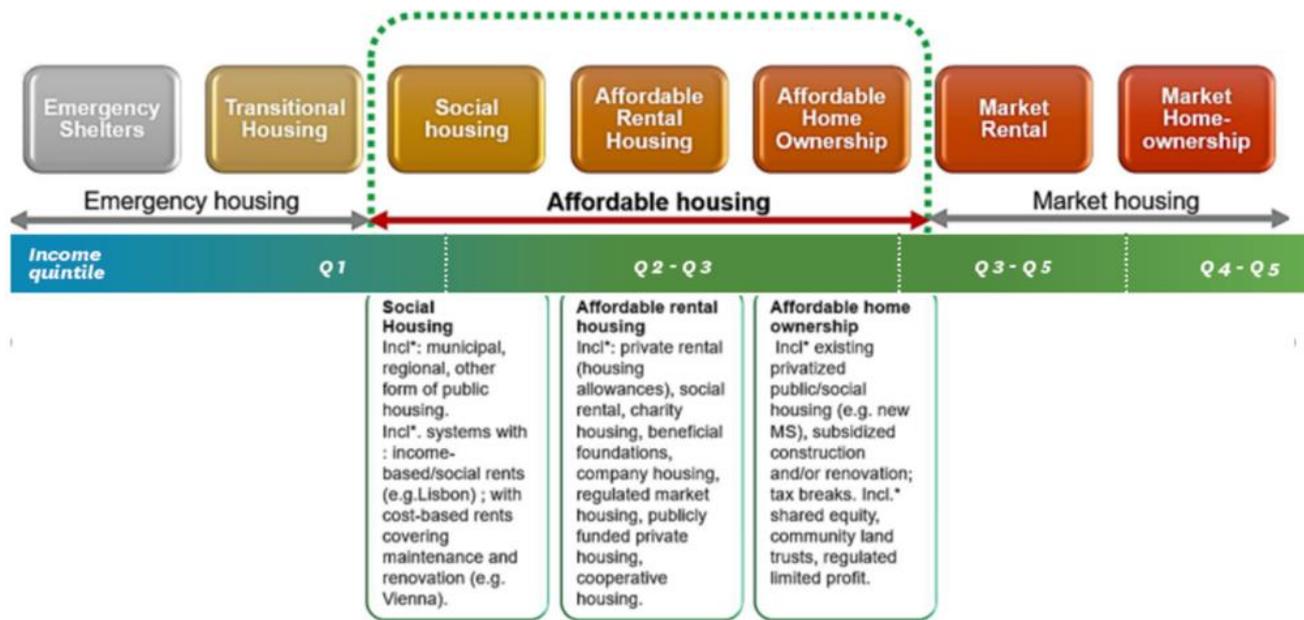
⁴ OECD (2016). Policies to promote access to good-quality affordable housing in OECD countries. Working Paper · March 2016

⁵ See more information at http://unassumingeconomist.com/wp-content/uploads/2016/09/Global-Housing-Watch-Newsletter_09_16.pdf

⁶ OECD (2016). Policies to promote access to good-quality affordable housing in OECD countries. Working Paper · March 2016; CEB (2017) Housing inequality in Europe; Vox (2018) Housing expenditures and income inequality: Shifts in housing costs exacerbated the rise in income inequality; World Bank (2018). Living and Leaving: Housing, Mobility and Welfare in the European Union

⁷ The Housing Partnership was established as part of the Urban Agenda for the European Union. As stated in the Pact of Amsterdam, its 'objectives are to have affordable housing of good quality. The focus will be on public affordable housing, state aid rules and general housing policy' See more information in the following sources: <https://www.cnhed.org/blog/2011/09/meet-the-continuum-of-housing/>, <http://www.communityhousing.org.nz/housing-continuum/>, <https://www.ahuri.edu.au/policy/ahuri-briefs/understanding-the-housing-continuum>

Figure 1: Affordable housing continuum according to income quintile



Source: Figure combines sources from European Urban Agenda, Housing Partnership⁹ and Community Housing¹⁰

The housing continuum framework presented above is useful in many regards. First, it allows defining more precisely what is meant by affordable housing - according to the European Urban Agenda, Housing Partnership, showing that such a concept is not a one-size-fits-all type of issue. Second, it helps define the target of affordable housing following the population income quintile. Affordable housing concerns primarily quintiles 1, 2 and 3, i.e. the low and the lower middle classes – and therefore does not include the high middle and high classes. This approach allows highlighting that affordable housing is not merely an issue affecting low-income households, but also the middle-class. The present analytical report will therefore follow such an approach, and whenever possible link the issue of housing affordability to income quintiles. However, it is worth noting that affordable housing can also be provided and managed by private stakeholders.

In this report, social housing is understood as part of the broader affordable housing concept (as described in Figure 1). The distinction made between the social housing sub-category and the two others – affordable rental housing and affordable home ownership, is the following: social housing with rents that are often income-based/social or (maintenance and renovation cost-based). On the other hand, affordable rental housing and home ownership may be provided by public and/or private institutions, and take the form of rental (housing allowances, social rental or cooperative housing) and home ownership (privatised public/social housing or subsidised construction).

Housing affordability is a contributing factor to labour, economic, social and intergenerational mobility¹¹. In other words, addressing housing affordability can help in providing workers with access to better jobs, thus ensuring their well-being and contributing to overall economic growth¹². According to the Housing Partnership Action Plan, in Europe an estimated 82 million citizens (16% of the EU population) spent more

⁹ The Housing Partnership of the Urban Agenda for the EU in a nutshell. https://housing-for-all.eu/fileadmin/user_upload/Presseunterlagen/Background_Paper_EUUA_Housing_Partnership_12-2018.pdf

¹⁰ Community Housing, <http://www.communityhousing.org.nz/housing-continuum/>

¹¹ See more information at: <http://www.housingeurope.eu/blog-1265/housing-affordability-is-a-key-determinant-of-individual-well-being-and-overall-economic-growth> and <https://www.jchs.harvard.edu/blog/homeownership-and-affordable-housing-a-key-part-of-upward-mobility-but-hard-to-come-by/>

¹² See more information at: <http://www.housingeurope.eu/blog-1265/housing-affordability-is-a-key-determinant-of-individual-well-being-and-overall-economic-growth>

than 40% of their disposable income in 2017¹³. Eurostat provides an EU average of 10.4%, with shares varying largely from 39.6% in Greece to 2.8% in Cyprus.

Housing exclusion and house deprivation considered to be one of the most tangible factors of inequality. They exacerbate societal division and cement it over generations, curbing social and economic mobility.

Housing affordability is also about the quality of housing. According to the recent study by Eurofond, heating, insulation and cramped living conditions have negative impact on health and increase the vulnerability to accidents. Indirectly, inadequate housing has negative effect on productivity and reduces economic opportunities for citizens, who cannot afford to live in proximity to economic centres. Tackling the issue of housing affordability and quality can result in estimated EUR 194 billion annually in direct savings linked to healthcare and the provision of social services, as well as indirect savings and improvements in productivity¹⁴. This report hence takes account of some of the housing quality indicators in its analysis of housing affordability.

Therefore, public policies are being set in place to support the development of affordable housing at the European, national and city levels. Investments in affordability contribute to the Europe 2020 Strategy, as well as to the Sustainable Development Goals (SDGs) in terms of better inclusion, climate goals, the implementation of EPSR and economic recovery¹⁵. EU Member States have put in place several policies and instruments to boost affordable housing, mostly by implementing rent regulations. Last, more and more city planning policies embrace holistic approaches, viewing housing policy as a mean to foster diverse and sustainable communities, to improve the quality of life and promote employment^{16,17}. While these are laudable efforts, questions arise as to which extent these strategies, policies and instruments are coordinated, and what type of lessons learnt can be drawn and integrated in future (affordable) housing policies. There is a growing recognition that the housing affordability issue is strongly connected to other sectoral policies such as transport, energy and urban planning.

This can be exemplified in the recent shift towards more holistic and integrated approach towards sustainability, such as the “built environment” concept. The objective behind is to combine smartly the reduction of energy and resources; the improvement quality of life in the built environment; and the creation of more business opportunities. The present report will hence also look at the sustainability dimension around affordable housing.



Issues of housing affordability are strategically targeted for the first time at the EU level by the EU Urban Agenda and its Housing Partnership Action Plan (HPAP) with 12 recommendations, paving the way to affordable quality housing for all.

The recommendations establish affordable housing as a ground element of the sustainability of urban development. The present analytical report aims to contribute to three of HPAP’s recommendations: “Affordable housing good practice database”, “Monitoring system for affordable housing in the EU” and “Policy guidance for the supply of social and affordable housing¹⁸”.

The objective of this report is to provide lessons-learnt and highlight a set of evidence-based recommendations for policy-makers on how to support housing affordability and sustainability. Chapter 2

¹³ The Housing Partnership FINAL ACTION PLAN, <https://ec.europa.eu/futurium/en/housing/housing-partnership-final-action-plan-0>

¹⁴ Eurofond, Inadequate housing is costing Europe €194 billion per year. <https://www.eurofound.europa.eu/fr/news/news-articles/inadequate-housing-is-costing-europe-eu194-billion-per-year>

¹⁵ Ibidem

¹⁶ Swedish Ministry of Culture, Policy for designed living environment, https://www.government.se/48ec28/contentassets/c008469d86b848f3918a1efcd7d7fb2f/webb_policy-for-designed-living-environment.pdf

¹⁷ Urban Development Network, An integrated approach in urban planning https://ec.europa.eu/regional_policy/sources/conferences/udn_italy_2018/raffaella_gentile.pdf

¹⁸ Urban Agenda for the EU, The Housing Partnership Action Plan, 2018, https://ec.europa.eu/futurium/en/system/files/ged/final_action_plan_euua_housing_partnership_december_2018_1.pdf

of this study will provide an **overview of the state of play** in terms of housing market situation, affordability and sustainability. This analysis will be based on statistical data, comparable across the EU. Because affordability is the most pressing issue in urban areas, we also take account and analyse city-level data, when possible. **Chapter 3** and **Chapter 4** respectively aim at identifying some of the **drivers and obstacles around housing affordability** – looking at the regulatory and financing landscapes, while considering horizontal issues (including transport, sustainable urban planning and energy). **Chapter 5 will dive in relevant policy initiatives**, touching upon housing affordability and sustainability. In doing so, it will aim to highlight some of the best practice, while illustrating potential implementation drivers and obstacles. Finally, **a set of policy recommendations will be formulated in Chapter 6**, based on the performed analysis.

2.

State of play of housing affordability across the EU

Real estate economics postulate that housing is a dual market: on the one hand, it represents a service to people, on the other hand, it is also an asset. The state of housing markets across the EU have brought an additional aspect to prominence: adequate housing is a human right. It is also the basis for inclusive and sustainable urban communities and social peace.

The number of households in the EU has risen by 5.3% in the 2010-2017 period, from 210.1 million to 221.4 million.



With the growing share of population living in cities, demand pressures in urban regions are high, at the same time housing shortages in economically attractive regions are increasing, pushing prices and rent levels up.

This has made the availability of affordable housing a hot topic for policy makers across the continent. The current section provides insights into housing markets in the EU by exploring market indicators. Affordability is discussed in the second part of the section, illustrated by statistical and qualitative indicators. The issue is most pressing in the cities; therefore, the section below considers developments by urbanisation rate and applies examples from European cities.

Housing market in the EU

While the housing market is a subject to supply and demand forces, understanding its complexity is not as straightforward. The analysis of EU MS¹⁹ shows that demand for housing, especially in cities across Europe, has been on the rise in recent years, due to income growth, low interest rates, fiscal incentives for home owners and population growth.

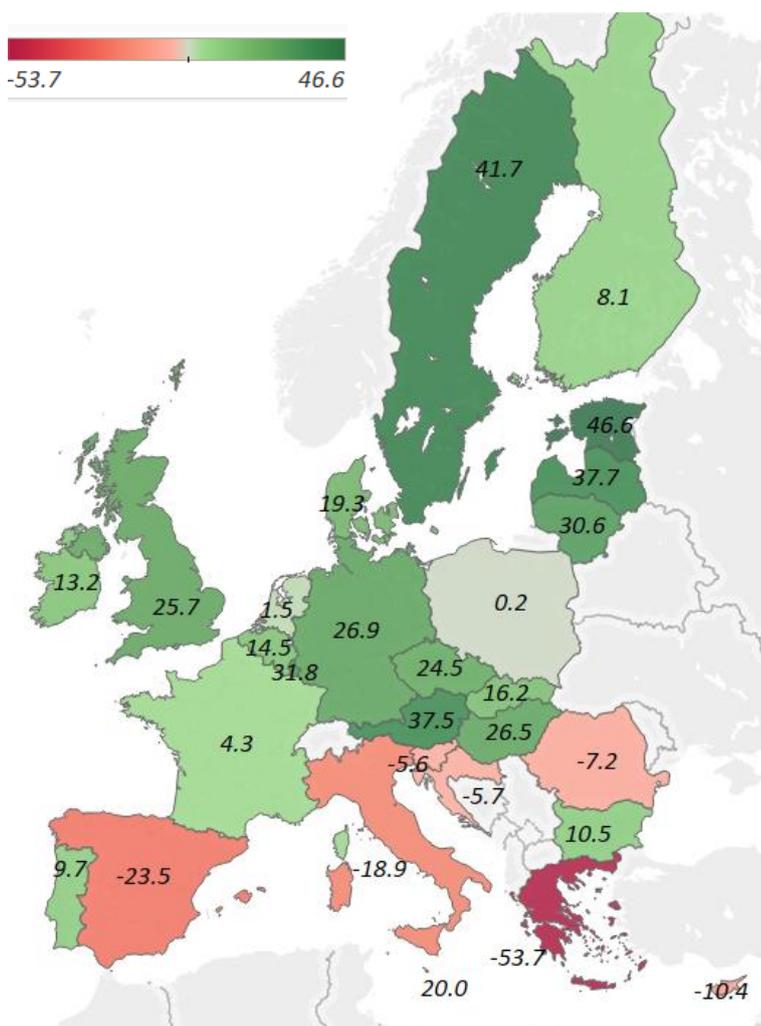
Often, besides the high demand, housing markets are also characterized by supply constraints, stemming from topographical specificities, such as natural borders of cities (e.g. seafont, terrain), to man-made constraints like local regulations on land use, building permits etc.

Housing becomes more expensive across Europe, with the house price index²⁰ rising in most EU countries. Figure 2 below represents the general trend in the house price index for total dwellings in the EU MS. The house price index across the EU has been rising overall and in most of the EU countries. Prices exhibited the largest growth in Estonia (+ 46.6 percentage points), Sweden (+41.7%) and Latvia (+37.7%). On the other end of the spectrum were Spain and Italy, where prices deflated by 23.5%, 20.0% and 18.9% respectively.

¹⁹ Analysis refers to overarching trend, present in the majority of country specific analysis of the construction sector, see ECSO Country Fact Sheets

²⁰ This refers to the Eurostat Housing price index, measuring the changes in the transaction prices of dwellings purchased by households.

Figure 2: Evolution of EU-28 house prices index between 2010 and 2017²¹

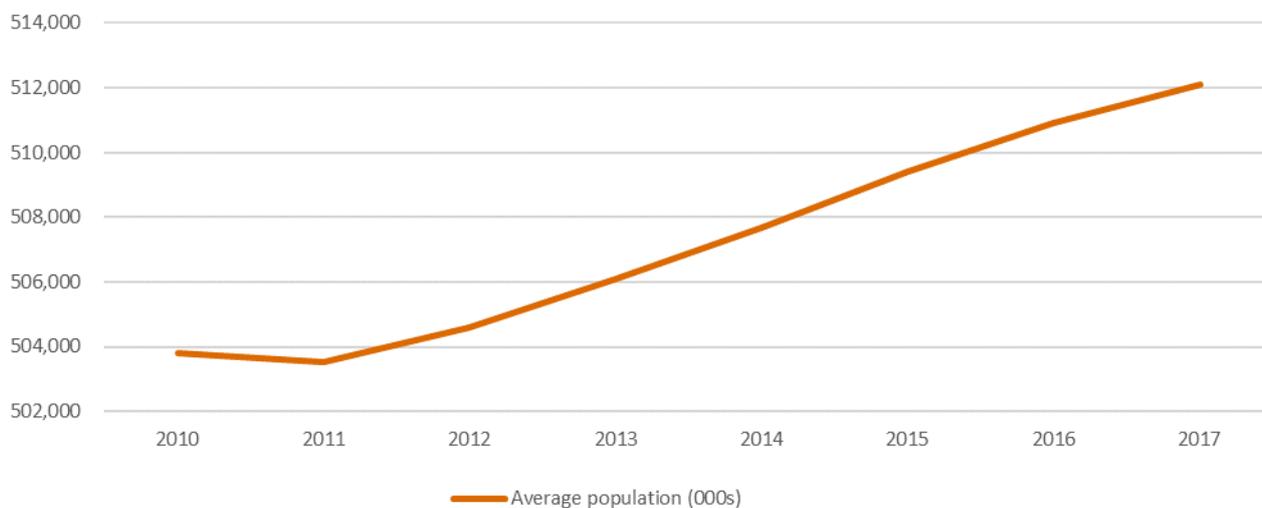


Source: Eurostat, 2019

Population growth is unevenly distributed between the countries due to, among other factors, the increasing migration flows and intra-EU mobility between MS. The population of the EU-28 has been growing steadily between 2010 and 2017, reaching 512.1 million. This represents an increase of 1.6% compared to 2010 (503.8 million).

²¹ No data available for Greece

Figure 3: EU-28 population change between 2010 and 2017



Source: Eurostat 2018

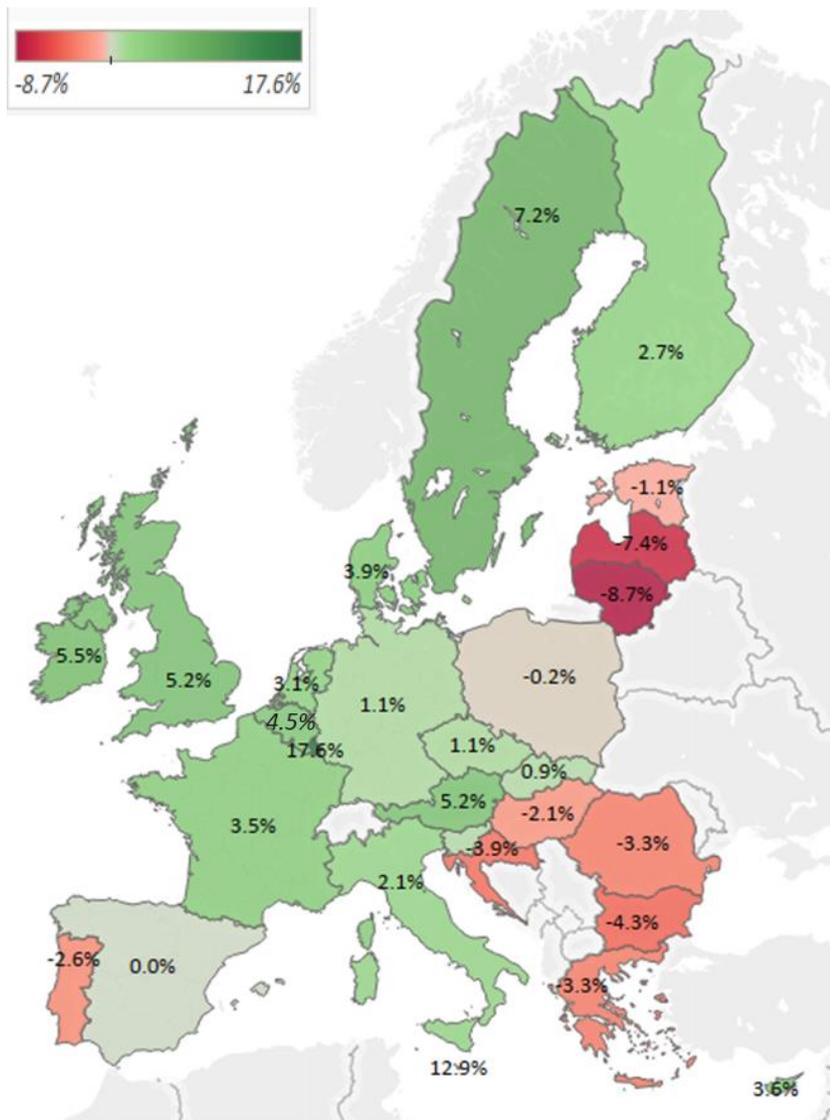
Looking at the country level, 18 countries out of the EU-28 saw their population increasing, while for the remaining 10 EU MS it decreased. The countries with the largest population growth are Luxembourg (17.6%), Malta (12.9%) and Sweden (7.2%). On the other end of the spectrum, Lithuania (-8.7%), Latvia (-7.4%) and Bulgaria (-4.3%) marked the strongest opposite trend. These developments are partly linked to migration toward favourable economic and other living conditions, and toward cities.



Even in countries with shrinking population, housing demand continues to grow due to high preference for living in cities. This preference is linked to the higher job concentration of urban areas. In the case of Bulgaria, for instance, the capital city of Sofia ranked 17th globally among the cities with the fastest rising residential prices in 2017²². The share of population living in cities increased from 43.2% to 45.7% over 2010-2017, while the overall population in the country shrunk by 4.3% over the same period.

²² Knight Frank, Global residential cities index, <https://content.knightfrank.com/research/1026/documents/en/global-residential-cities-index-q4-2017-5413.pdf>

Figure 4: Change in population for the EU-28 between 2010 and 2017



Source: Eurostat, 2019

Eurostat's annual report on European urbanisation estimates that the percentage of people living in cities in the EU will continue rising, projected to reach over 80% by 2050²³. The inner-European and the within-country movement of people, as well as third-country newcomers, contribute to the rising population and the urbanisation trend²⁴. Several large cities and capitals are the most affected by the movements of people. In Berlin, for instance, after a period of stagnation, between 2005 and 2010 the number of inhabitants increased by almost 50,000. This growth has only accelerated since 2010 and between 2012 and 2017 the population grew by 243,500 people. The Berlin Senate expects this trend to continue, with estimated 157,000 people moving to the city by 2030²⁵. In Rotterdam, 49% of the 634,264 inhabitants are foreigners. Similar to Berlin, with growing economic prosperity, the city is set to increase in population, with key pull factors being labour shortages, attracting a large number of migrants²⁶. In Luxembourg, which recorded the largest growth (see above), almost a third of the population was born in another EU MS. These examples

²³ Eurostat, Urban Europe, <https://ec.europa.eu/eurostat/documents/3217494/7596823/KS-01-16-691-EN-N.pdf/0abf140c-ccc7-4a7f-b236-682effcde10f>

²⁴ World Economic Forum, Migration and its impact on cities, http://www3.weforum.org/docs/Migration_Impact_Cities_report_2017_HR.pdf

²⁵ Ibidem

²⁶ Ibidem

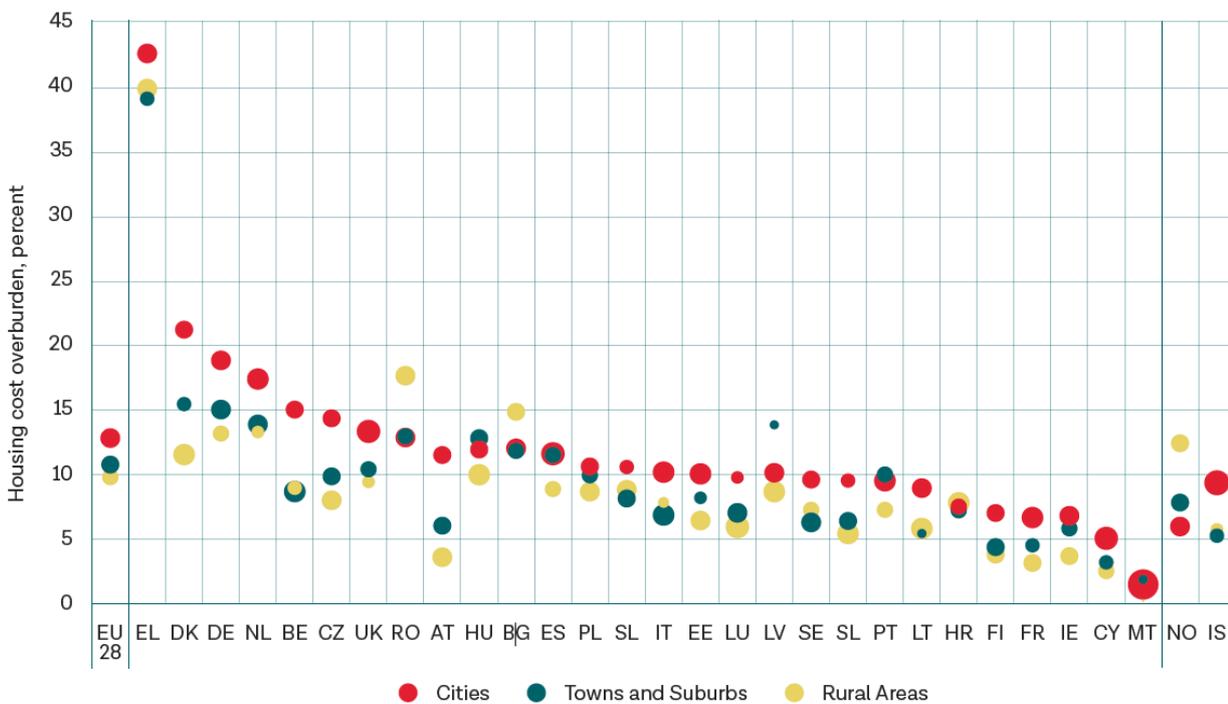
highlight the pattern of movement toward economic centres of activity, impacting both population and urbanisation trends.

More than two thirds of Europeans are living in urbanised areas. The urbanisation rate varies across the EU-28. The share of the population living in densely populated areas amounted to 41.7% in 2017, with the share living in intermediate urbanised areas standing at 31.0% (Figure 7). Overall, the share of Europeans living in urban areas slightly decreased from 73.8% in 2010 to 72.7% in 2017²⁷. This could be due to rising prices, driving residents to look for more affordable living situation outside of urban areas.

Focusing on cities and greater cities specifically, the UK has the highest share, 90.8%, followed by Spain (78.2%), Portugal (65.4%), and Finland (59.2%). On the other hand of the spectrum are Slovakia (22.0%) and Austria (30.6%). It is worth noting that the official definitions of cities and urbanised areas can vary across EU MS, resulting in inconsistencies.

Urbanisation pressures affect house prices, boosting demand. Analysing issues around housing affordability requires to go beyond national data, by looking at (territorial) differences between cities, towns and suburbs, and rural areas. This can be illustrated by the housing overburden cost, which is generally higher in cities than in rural areas, in 26 out of the 28 EU Member States (see Figure 5).

Figure 5: Housing overburden costs in cities, towns and suburbs, and rural areas in the EU 28 in 2014



Source: World Bank, 2018

The differences in housing overburden between cities and rural areas is partly explained by the fact that productivity growth, including higher wages and better jobs, is concentrated in urban areas. In turn, this attracts more (skilled) people to cities, where housing prices are often the highest. As a result, house prices in cities and their agglomeration increase. For example, house price grew by 28% between 2010 and 2016 in Amsterdam, and by over 40% in Luxembourg between 2010 and 2017. House prices



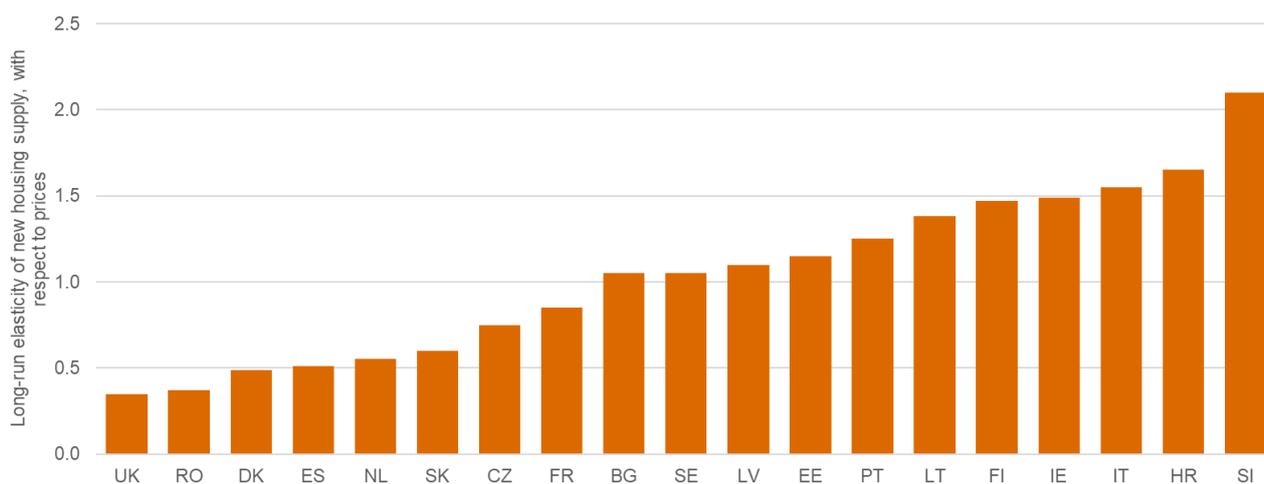
²⁷ In this context, urban areas is defined to include both the population living in densely populated areas and intermediate urban areas.

are growing faster than the income in a majority of EU MS and in some instances, housing price growth in cities has been faster than the growth of households' income²⁸, decreasing the affordability of dwellings. The issue of urbanisation pressure is hence likely to remain or even increase in the years to come.

Governments can impact the house prices by supporting the residential construction, in a way that best respond to housing demand, thus maintaining house prices at a reasonable level. An OECD study²⁹ estimates that “increasing the responsiveness of housing supply from the low level that prevails in the Netherlands to the average OECD level would increase households' annual mobility rate by around 50%, possibly because a responsive supply evens out housing costs across regions”. The responsiveness of housing supply varies widely in the different EU MS, which is partly due to the different regulatory and institutional environment in place (see Figure 6 below). The responsiveness of housing supply of EU Member States has also historical (and political) roots. According to Housing Europe, government policies have traditionally been focusing on providing aids to buy or rent existing dwelling rather than increasing housing supply. In fact, the share of expenditure on housing and community amenities of EU Member States decreased from 0.9% to 0.6%, i.e. from EUR 109.6 billion to EUR 91 billion. This is not to ignore the commitments and (sometimes significant) investments undertaken by some EU member states such as the UK³⁰, Germany³¹, and more traditionally Austria, France, Sweden and the Netherlands.

The ability of governments to boost housing supply partly determines the severity of housing affordability constraints.

Figure 6: Responsiveness of housing supply to house price growth in some of the EU Member States



Source: World Bank, 2018

Note: Data for other EU countries is not available

For instance, while the responsiveness of residential investment to a one percentage point increase in housing prices is less than 0.5% in the UK or in Romania, it goes up to over 1.5% in the case of Italy, Hungary and Slovenia. This shows that the UK housing supply was less responsive than the Slovenian one, which influences in turn housing affordability.

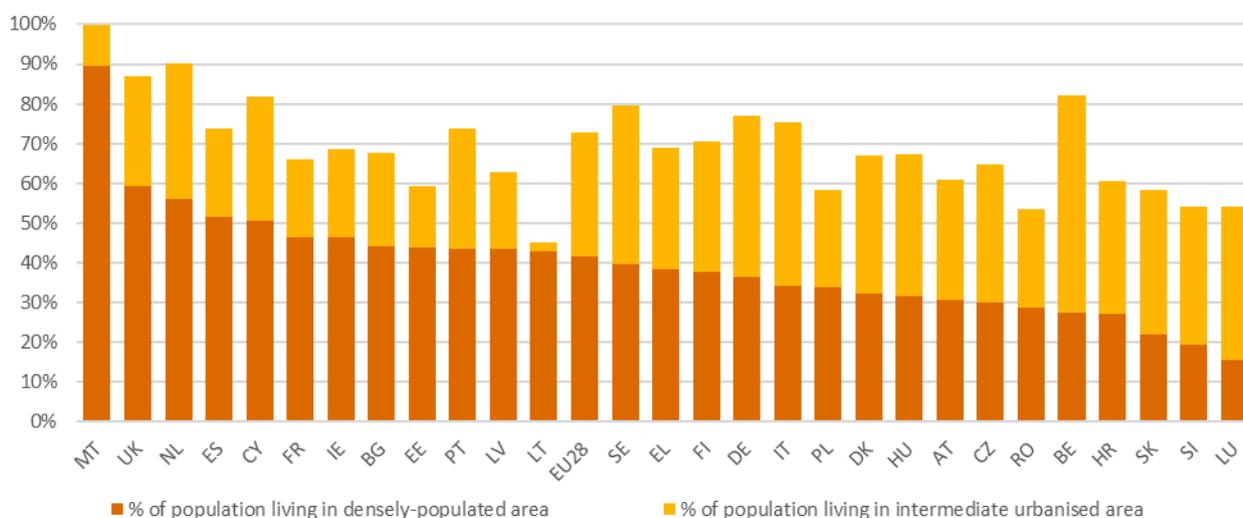
²⁸ Housing Europe (2017). The state of Play of Housing in the EU 2017. <http://www.housingeurope.eu/file/614/download>; see also more information at <https://www.europeandatajournalism.eu/News/Data-news/All-over-Europe-housing-has-become-all-too-expensive>;

²⁹ OECD (2011). Housing and the Economy: Policies for Renovation.

³⁰ See more information at <https://www.gov.uk/government/news/brookshire-confirms-social-housing-investment-boost>

³¹ See more information at https://www.bmi.bund.de/SharedDocs/downloads/DE/veroeffentlichungen/2018/ergebnisse-wohngipfel.pdf?__blob=publicationFile&v=3

Figure 7: Urbanisation rate in 2017³²



Source: Eurostat 2018

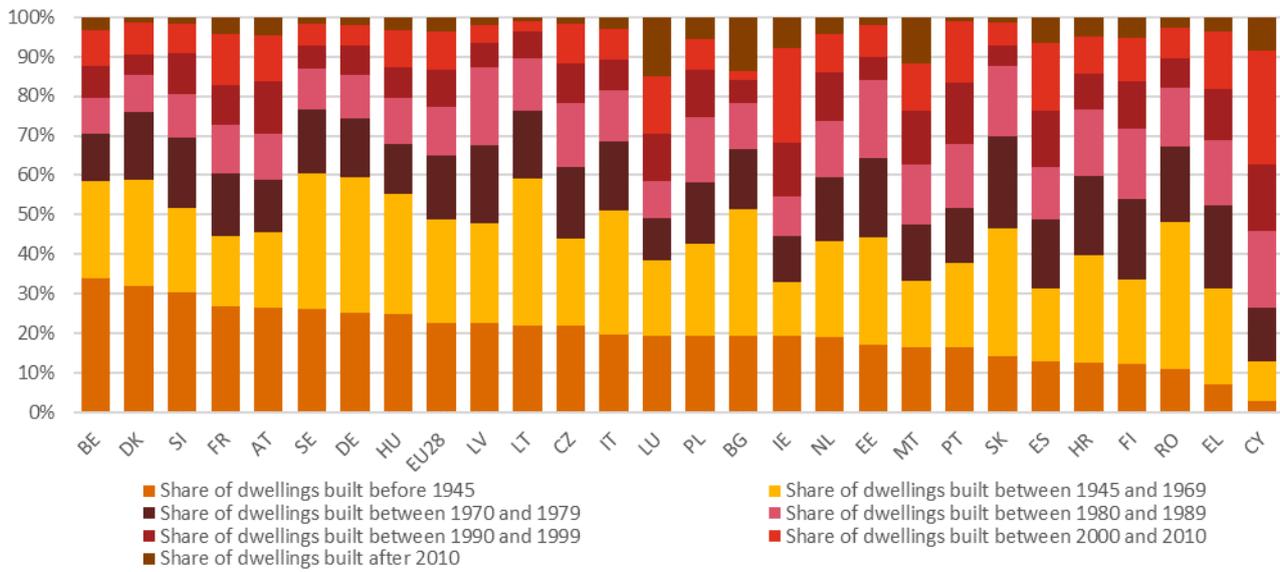
The existing housing stock in Europe is ageing. Growing population and urbanisation trends create a need for refurbishing the existing stock but also building new. The average age of the European housing stock is among 30 and 100 years.

75% of the housing stock in the EU is built before 1979, with the share of dwellings built after 2000 standing at 13.3% and the ones built after 2010 – at only 3.7%.

The situation varies across MS. Belgium, Denmark and Slovenia have the largest share of the oldest housing stock – built before 1945 (see Figure 8). This has implications for the quality of housing, in particular, regarding energy efficiency (insulation of walls and roofs, etc.). Old building stock, which is not refurbished or renovated to constitute adequate housing conditions, negatively affects the quality of life of inhabitants. For example, the share of the Belgian population living in dwellings with a leaking roof, damp walls, floors or foundation, or rot is above the EU-average (13.3%), reaching 18.5% in 2017. This percentage is even higher in Slovenia (22.0%). Conversely, Cyprus, Greece and Romania have a relatively “younger” building stock. In fact, the largest share of dwellings in Cyprus was built between 2000 and 2010 (29.0%), followed by Ireland with 24.2%. This residential construction activity corresponds to housing market booms during that period.

³² No data available for “% of population in cities and greater cities” in 2017 for some countries

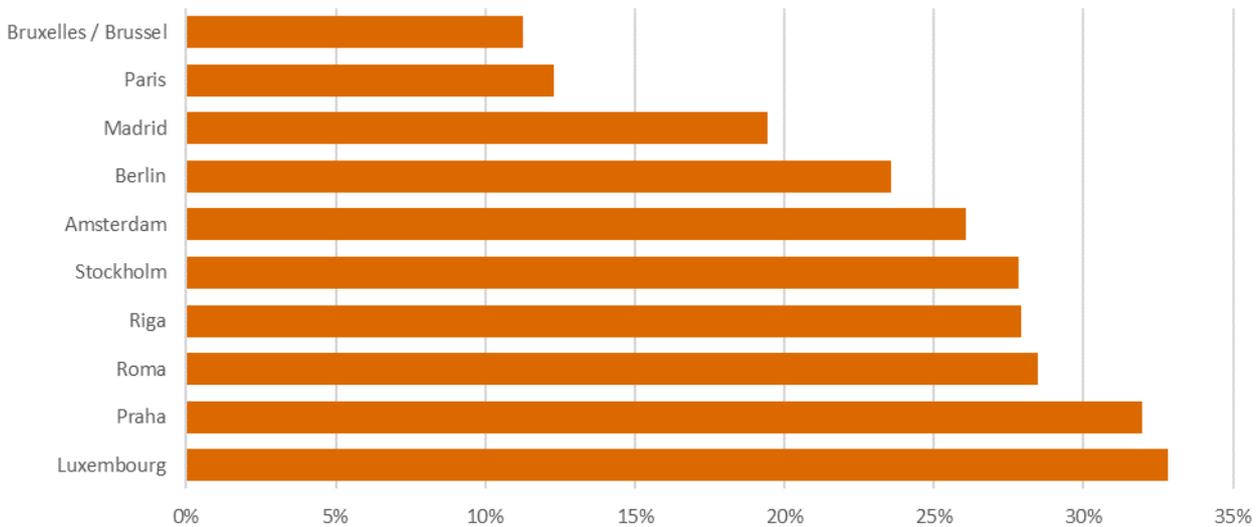
Figure 8: Building stock in terms of age in EU-28 in 2014³³



Source: Eurostat

Figure 9 shows a breakdown of 10 European cities and the share of “younger” residential construction in each of them. Out of this sample, Brussels has the lowest share of dwellings, built after 1980, despite, for instance, the large increase in population (+16.7%)³⁴ between 2000 and 2011 (the reference year of the data in Figure 9). This is in line with the general low level of new residential construction in the country overall, as illustrated in Figure 8. On the other end of the spectrum is Luxembourg City, recording the highest share of new residential buildings, well above 32%. This corresponds to a period of fast population growth, putting pressure on the housing market to accommodate new comers. It is also in line with the strong growth in the house price index for Luxembourg 31.8% over 2010-2017 (Figure 2).

Figure 9: Share of new building (built after 1980) in 2011



Source: Urban Data Platform, 2019

³³ No data available for subsequent years

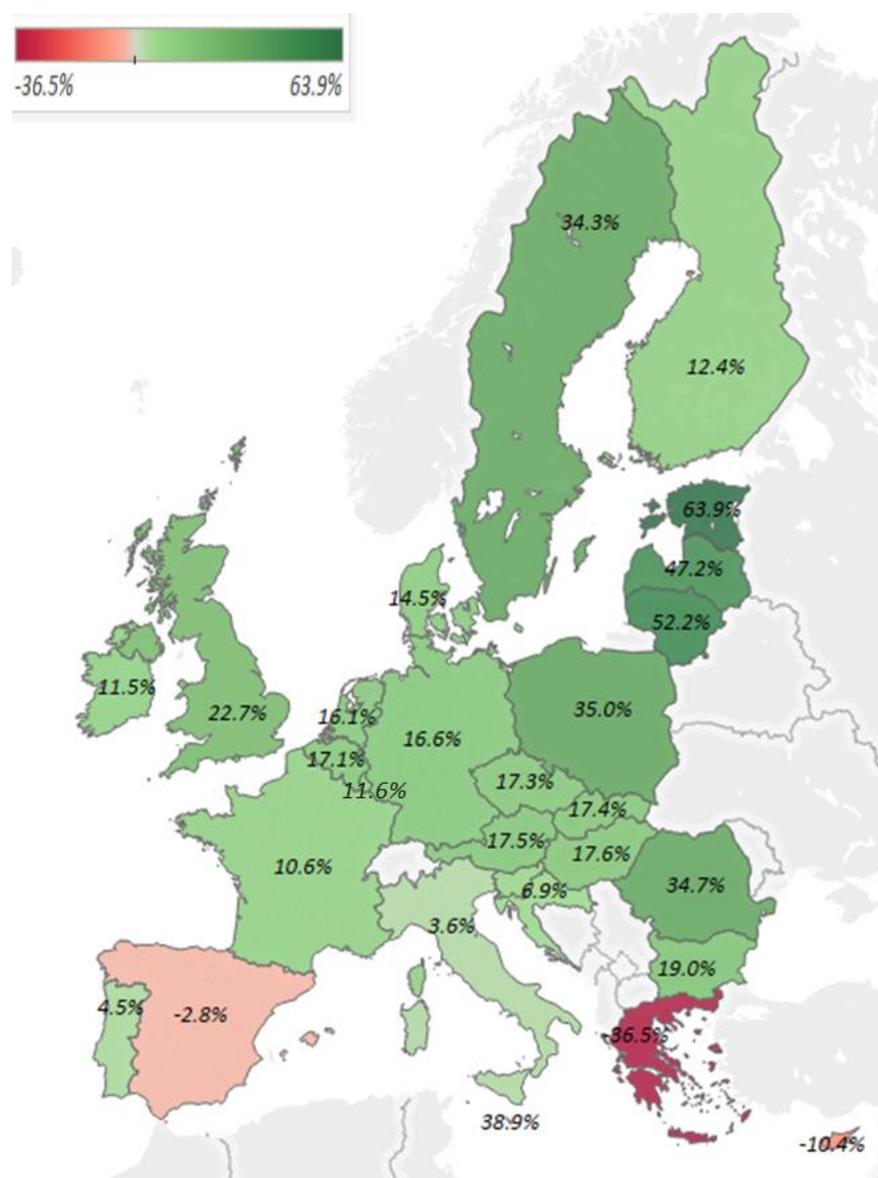
³⁴ Brussels Institute for Statistics and Analysis, Population http://statistics.brussels/files/figures/1.1_population_evolution_EN.xls

The pressures from growing population and urbanisation, leading to increased demand, combined with considerations regarding the supply of quality dwellings, pose important questions about the affordability and sustainability of housing in the EU. **Demand is also fuelled by rising income levels across MS.**

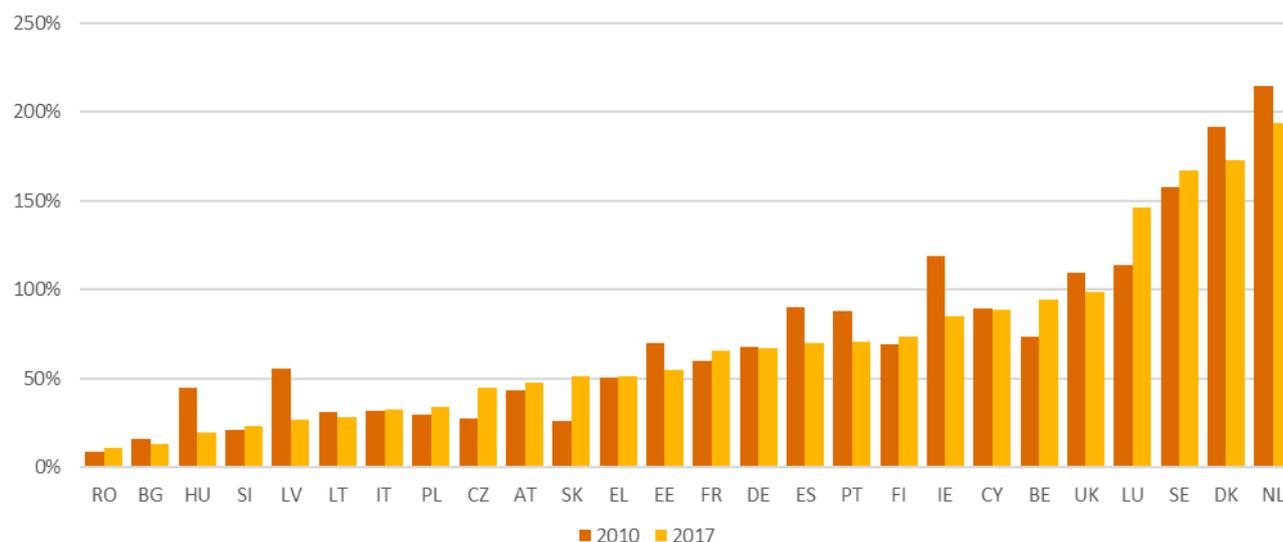
Average median net income in the EU-28 between 2010 and 2017  **13.9%**

The average median net income in the EU-28 has been growing steadily between 2010 and 2017, reaching EUR 16,909. This represents a 13.9% increase. In 2017, 11 EU MS recorded a median net income above the EU-28 average. Member States across the EU-28 show high disparity in terms of annual net income, ranging from EUR 2,742 (Romania) to EUR 36,076 (Luxembourg). Importantly, 25 countries out of the EU-28 saw their disposable income increase over the period 2010-2017, with the Baltic states marking the largest growth: Estonia (+63.9%), Lithuania (+52.2%) and Latvia (+47.2%). Conversely, Greece, Cyprus and Spain are the three countries that saw their disposable income dropping respectively for -36.5%, -10.4% and -2.8%.

Figure 10: Evolution of the EU-28 average median equivalised net income between 2010 and 2017 (in EUR)



Source: Eurostat 2018

Figure 11: Mortgage debt to income ratio between 2010 and 2017³⁵

Source: Hypostat 2019

Overall, rising incomes in the low interest rate environment in the EU (the ECB refinancing rate remained at 0% between early 2016 and the end of 2018) have had a positive effect on household spending, including on home purchases.

There is a large variation in mortgage debt to disposable income ratios across the EU-28. The ratio is indicative of the ability of households to pay back their debt, as it is calculated as the debt arising from loans to the gross disposable income, earned in a year. High mortgage to income ratio indicates to an extent the overburden for households with housing related costs.



High levels of debt to income indicate the borrower's confidence in the market and readiness to borrow against collateral. In countries with heated housing markets, the increased value of the housing asset could incentivise home owners to fund spending or further investments in housing by borrowing more³⁶.

The debt-to-income ratio alone, however, does not deliver a complete picture of the financial resilience of households, as credit conditions, tax breaks for mortgages and interest rates play a role as well (see Drivers for sustainable and affordable housing).

The general picture is mixed with Luxembourg, Slovakia, and Belgium seeing the largest increases in total outstanding residential loans to disposable income, growing by 32.4, 24.8 and 20.5 percentage points over 2010-2017, respectively. In Luxembourg, the outstanding residential loans reached 146.2% of disposable income in 2017, 94.2% in Belgium and 51.0% in Slovakia. In reaction to these trends, national banks have given indication of tightening mortgage conditions, with the Slovak central bank, for instance, announcing caps on housing loans^{37, 38}. The ratio has decreased in some MS, as much as 33.1 percentage points over the same period, for instance in Ireland. Latvia and Hungary saw similarly large drops, 28.9 and 25.0 percentage points, respectively. Similarly, this does not necessarily indicate a more stable financial situation, as it may reflect low wage growth or uncertainty in the market, driving investments toward alternative assets or households toward saving.

³⁵ No data available for some countries in 2017. The analysis between 2010 and 2017 remains not possible.

³⁶ OECD, Statistical insights, <http://www.oecd.org/sdd/na/statisticalinsightswhatdoeshouseholddebtsayaboutfinancialresilience.htm>

³⁷ vrt News, National Bank warns banks against being too flexible, <https://www.vrt.be/vrtnws/en/2019/02/15/national-bank-warns-banks-against-being-to-flexible-when-handing/>

³⁸ The Slovak Spectator, Rules for mortgages change, <https://spectator.sme.sk/c/20471901/rules-for-mortgages-change.html>

In 2017, the average EU-28 mortgage debt to GDP ratio was 45.7%. 8 countries out of the EU-28 have their current mortgage burden related to GDP being above the EU-28 average. For instance, Netherlands and Denmark are both countries that have by distance the highest ratio respectively for 92.1% and 86.1%. Nevertheless, their mortgage burden over the period 2010-2017 decreased respectively by 11.1% and 6.5%. Conversely, Romania and Bulgaria have the lowest mortgage burden related to GDP (respectively for 7.6% and 8.3%).

Both these ratios, **mortgage debt to disposable income** and **mortgage debt to GDP**, are measures used to screen potential risk stemming of indebtedness, not only for households, but for national economies. Together with other ratios they are used to identify vulnerabilities related to residential real estate.

In conclusion, despite fragmentation, housing markets in the EU do share some common trends in terms of a generally rising house price index, similar interest rate environment, growing population and rising urbanisation. With a rising age of the buildings stock, considerations regarding the quality of living space also arise. While incomes are also growing overall, further considerations are due to understand what these market characteristics mean for the future development of European cities and housing, especially in terms of affordability.

Housing affordability in the EU

The following section discusses several indicators of housing affordability to explore existing trends in the EU. Specifically, these indicators are housing cost overburden rate, housing deprivation and overcrowding rate, tenure status according to income, public expenditure on housing, as well as qualitative indicators, such as mobility aspects, education, and family integrity. A recent study highlights the interconnection between growing urban populations and the need for affordable and adequate housing in cities. European cities like Berlin, Athens, Paris, and Amsterdam exemplify the challenges and opportunities that urban growth can bring, having to develop innovative strategies to ensure their sustainable development³⁹.

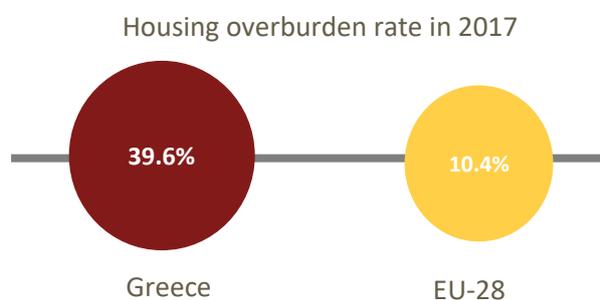


Steeply rising house prices perpetuate wealth disparities and can have a long-lasting effect on keeping household wealth low for the lowest income quartile earners and vice versa, having negative effects on socio-economic mobility.

Generally, affordability is measured as the relationship between housing cost or price and household income. Even when the house price index exhibits a downward trend, this is not necessarily indicative of improving affordability. In Italy, for instance, the price index slightly decreased by 1.2% over 2015-2017. This, however, was paralleled by a higher decrease of the mean equivalised net income over 2012-2015. Similarly, in Cyprus, the house price index flattened over recent years. Incomes, however, dropped significantly by 10.4% over 2010-2017, thus affecting affordability negatively.

The housing cost overburden rate has slightly improved on average in the EU between 2010 and 2017. It represents the percentage of the population living in a household where total housing costs represent more than 40% of the total disposable income. The average share for the EU-28 stood at 10.4% in 2017, similar to the share of population in arrears, discussed below. The highest rate is recorded in Greece (39.6%), followed by Bulgaria (18.9%) and Denmark (15.7%).

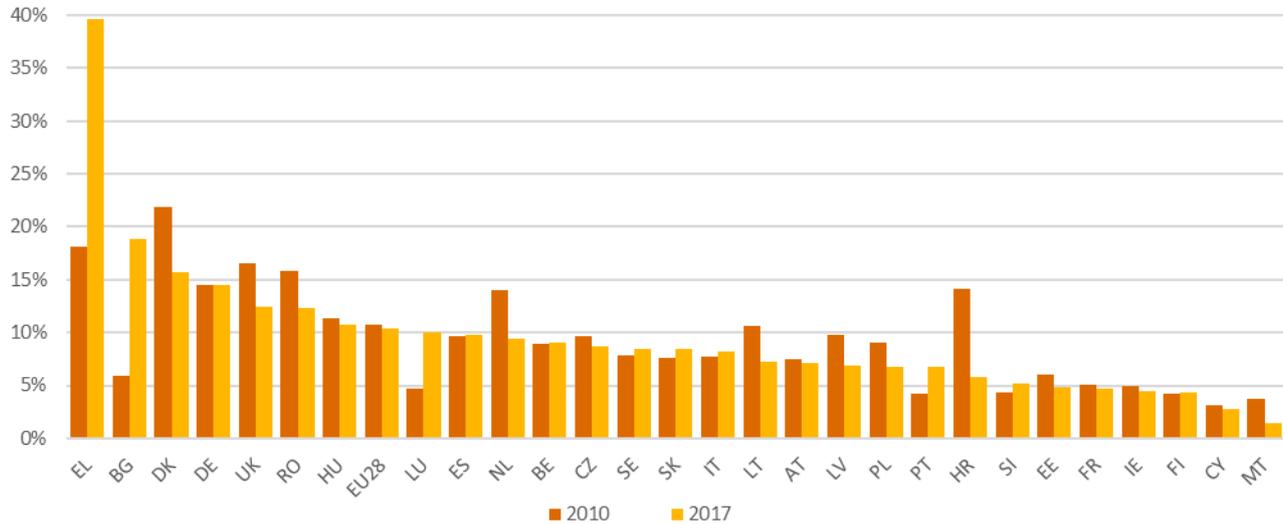
On average, the rate remained rather stable over 2010-2017, with the exceptions of Greece, Bulgaria, Luxembourg and Portugal where it increased more notably. There were also MS, where the rate



³⁹ World Economic Forum, Migration and its impact on cities, http://www3.weforum.org/docs/Migration_Impact_Cities_report_2017_HR.pdf

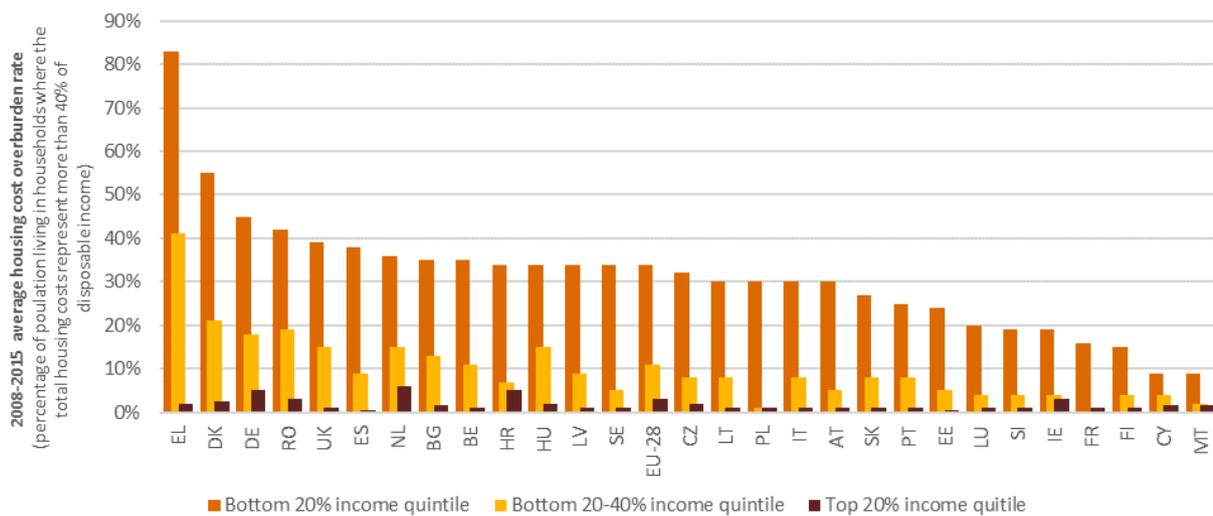
decreased. Despite representing the third highest overburden rate, Denmark exhibited a downward trend over the period. Notable decreases were marked also in Croatia, Netherlands, UK and Romania. These figures represent an average for the total population. When accounting for the various income groups, however, the picture looks quite different (Figure 13).

Figure 12: Housing cost overburden rate in the EU-28 (%)



Source: Eurostat 2019

Figure 13: Housing cost overburden rate according to income quintile, 2008-2015



Source: CEB, 2017⁴⁰

Unsurprisingly, the overburden rate for the lowest income quintile is over three times larger than for other income groups. Towards the lower middle of the income distribution (20%-40%), the situation is far better, however, large disparity is still present compared to the top 20%. This illustrates the benefits of breaking down the data beyond the average, to reveal insights regarding policy target groups for affordable housing. Although the second quintile exhibits better results, it might be still higher than the average, revealing the need for more finely tuned policy support. As mentioned above, Eurostat defines households as overburdened, when they spend 40% or more of their disposable income on housing. The Housing

⁴⁰ CEB, Housing Inequality in Europe, https://coebank.org/media/documents/Part_3-Inequality-Housing.pdf

Partnership argues against this definition and for the inclusion of additional factors of affordable housing, instead of purely economic cost indicators. Such factors should include eviction and poverty rates, as well as a lower threshold for housing costs at 25% of disposable income⁴¹. The concept of the housing continuum also is an argument against simplified definitions and aims at viewing housing need as a range, departing from a “one-size fits all” understanding (see Figure 1). This involves breaking down income groups and identifying their specific needs accordingly. While adding criteria would increase the complexity of the overburden rate definition, stakeholders (the ones involved in the Housing Partnership, as well as numerous organisations employing the housing continuum as a working concept (see Footnote 8) argue for the need of dimensionality for adequate policies.

Connected to housing cost overburden rate, the share of population in arrears gives an additional indicator for affordability.

In 2016, one in ten persons in the EU was in arrears with their housing costs payments, including mortgage, rent and utility bills. The largest share of population in arrears was in Greece (47.9%), followed by Bulgaria (34.2%), Cyprus (26.6%) and Croatia (26.4%). 14 EU MS were above the EU-28 average of 10.4% with Germany, Czech Republic and Netherlands recording the lowest shares at 4.2%, 4.4% and 5.0%. Excluding utilities and only accounting for arrears with mortgages and rent, Greece also tops the statistic with 15.3%, well above the EU-average of 3.5% in 2016. This is followed by Cyprus (8.6%), Spain and France (both 5.2%) and Hungary (5.1%).

1 in 10

people in the EU had arrears in 2016

Housing inequalities, besides from being related to costs, are also a quality issue. This includes building quality, overcrowded dwellings, as well as quality of neighbourhoods and access to basic services, dependent on housing. Spatial quality issues are related to public transportation, education, health services and the sense of community, measured by the existence of green spaces, sports and cultural facilities, neighbourhood aesthetics, etc.

The total average overcrowding rate⁴² in Europe stood at 15.7% in 2017. This represents a 2.0 percentage points decrease compared 2010. Figure 14 shows the evolution of the total overcrowding rate between 2010 and 2017. Although the Netherlands has the fifth lowest overcrowding rates in the EU (4.1% in 2017), it has more than doubled in that period, exhibiting the largest change in the rate. Similarly, Austria’s rate is just below the EU-average at 15.1%, but at the same time it is the second fastest rising. The overcrowding rate in

Overcrowding rate in Estonia, 2010-2017

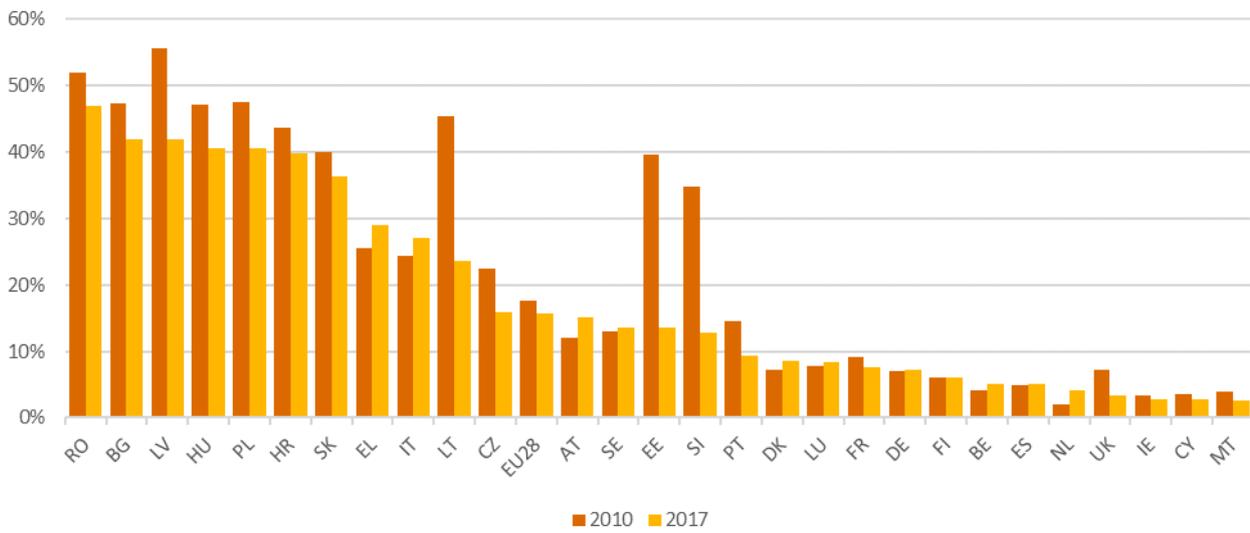


Estonia has seen the largest decrease over 2010-2017, dropping from 39.7% to 13.5%, below the EU-average. The trend in Slovenia is similar, exhibiting the second largest decrease in overcrowding over that period, from 34.9% to 12.8%. Overall, the majority of EU MS see some degree of decrease in the average overcrowding rate.

⁴¹ The Housing Partnership of the Urban Agenda for the EU in a nutshell https://housing-for-all.eu/fileadmin/user_upload/Presseunterlagen/Background_Paper_EUUA_Housing_Partnership_12-2018.pdf

⁴² “The overcrowding rate is defined as the percentage of the population living in an overcrowded household. A person is considered as living in an overcrowded household if the household does not have at its disposal a minimum number of rooms equal to: one room for the household; one room per couple in the household; one room for each single person aged 18 or more; one room per pair of single people of the same gender between 12 and 17 years of age; one room for each single person between 12 and 17 years of age and not included in the previous category; one room per pair of children under 12 years of age.”: https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Overcrowding_rate

Figure 14: Total overcrowding rate in the EU-28 (%)



Source: Eurostat, 2019

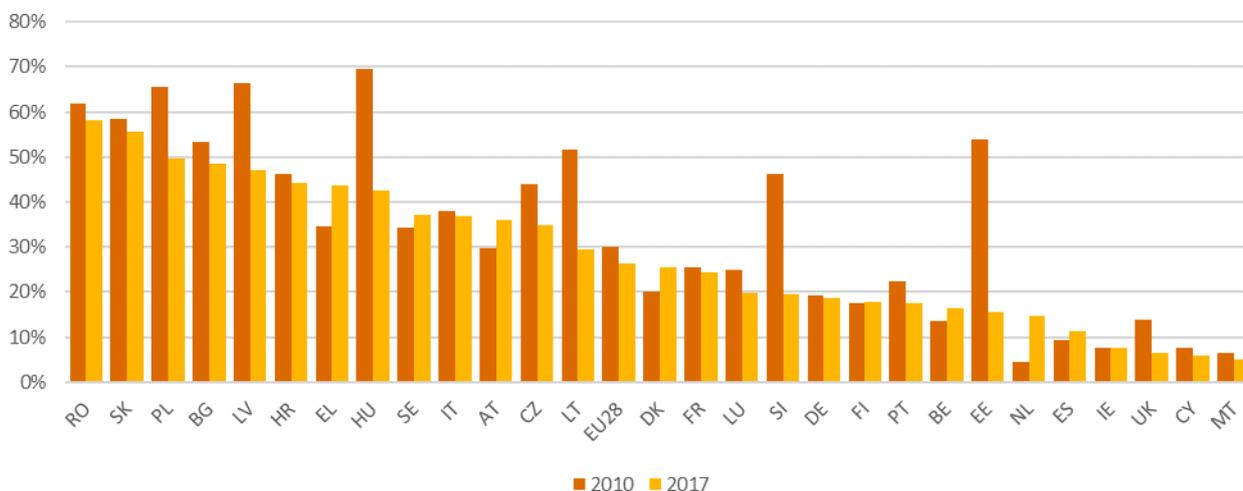
Accounting for the degree of urbanisation, the overcrowding rate is higher in cities, standing at 16.1% in 2017, compared 14.2% for towns and suburbs. The overcrowding rate in cities is highest for Bulgaria (49.8%), Romania (47.3%), Latvia (46.8%) and Croatia (43.6%). Conversely, Cyprus and Malta have the lowest overcrowding rates in cities (2.7% and 2.8% respectively).



Divided by income, households suffering the highest overcrowding rate unsurprisingly earn in the lowest quintile of the distribution: 25.2% of households in the bottom 20% of income live in overcrowded dwellings, the share for the second quintile of the distribution is 18.5% in the EU-28.

This data illustrates that the central focus for housing affordability is confined mainly in cities, concerning households of the bottom 60% of the income distribution the heaviest. Figure 15 shows the total overcrowding rate by poverty status, indicating that households earning in the first three quintiles of the distribution, bottom 60%, are affected the most by overcrowding in Romania (58.3%), Slovakia (55.6%) and Poland (49.8%). However, in all three, there is a downward trend, compared to 2010 rates. Conversely, Malta (5.1%), Cyprus (6.0%) and the UK (6.4%) performed best in that metric, exhibiting also a downward trend in overcrowding by poverty status.

Figure 15: Total overcrowding rate by poverty status in the EU-28 (%): below 60% of median equivalised income



Source: Eurostat 2019



The overcrowding rate is a measure of affordability, as it constitutes a ratio between the number of members in a household and the rooms available in the dwelling. It is also an indicator for the quality of life in a household.

The quality of life in a household is affected not only by the characteristics of the housing unit, but also by the living environment in the residential area, encompassing issues such as noise, air pollution, crime, community networks, educational opportunities and social infrastructure (i.e. adequately equipped hospitals, kindergartens etc.)⁴³.

In 2016, noise from neighbours or from the street was the most common issue for 17.9% of Europeans around the dwelling they inhabit. Malta and Germany were the countries, where this is most common, with 26.2% and 25.1% respectively, compared to 8.0% in Ireland and 8.5% in Croatia. This was followed by pollution or other environmental problems, with an EU-average of 14.0%, suffering from such issues close to where they live, again topped by Malta (30.3%) and Germany (23.2%). Crime, violence or vandalism was encountered by 13.0% of the EU population in proximity to their dwelling. The largest share of population experiencing this problem was in Bulgaria (25.0%), followed by Italy (19.4%). Unsurprisingly, these problems are more common for people, living in urban areas, rather than those living in rural ones. Additionally, people at risk of poverty are disproportionately affected by these three issues⁴⁴.

17.9%

people in the EU see noise as the biggest issue in their dwelling surroundings

Two thirds

of the EU population owns their dwellings

A further indicator of housing affordability is home ownership. **Owning one's home is not only related to purely economic considerations, such as one's capacity to buy, but is also engrained in national cultures and historical traits of housing.** Figure 16 illustrates an overall increasing tendency toward home ownership in the EU on average, although still, more than close to one third of EU citizens rent. In 2017, 30.7% of the

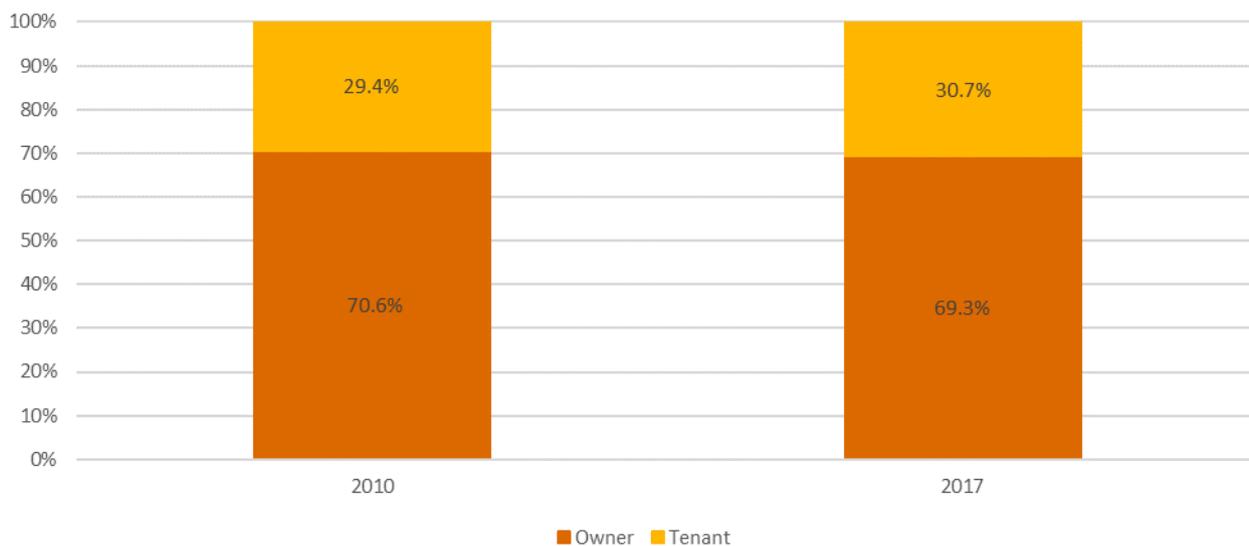
⁴³ Eurostat, Living conditions in Europe, 2018, <https://ec.europa.eu/eurostat/documents/3217494/9079352/KS-DZ-18-001-EN-N.pdf/884f6fec-2450-430a-b68d-f12c3012f4d0>

⁴⁴ Ibidem

population rented the dwelling they inhabit, compared to 29.4% in 2010. There are large variations across MS, however, with Germany and Austria exhibiting a low preference for owning, while Romania and Croatia have the highest owners’ shares (Figure 17).

Traditionally, across MS, the state has played diverging roles in the area of housing. In the 1990s, many Central and Eastern European countries underwent a process of transition toward market economies and democratic political systems. This resulted in the large-scale privatisation of the national housing stock and overall deregulation of the residential sector. A large pool of home owners emerged, as can be seen today in the cases of Romania, Croatia, Slovakia, Lithuania, Hungary, Poland etc., topping the ranking of home ownership shares. These countries, however, are also among the ones with the highest housing deprivation and overcrowding rates, as people who were able to purchase their home could not afford to maintain them⁴⁵.

Figure 16: Average EU-28 home ownership rate in between 2010 and 2017



Source: Eurostat, 2019

⁴⁵ CEB, Housing inequality in Europe, https://coebank.org/media/documents/Part_3-Inequality-Housing.pdf

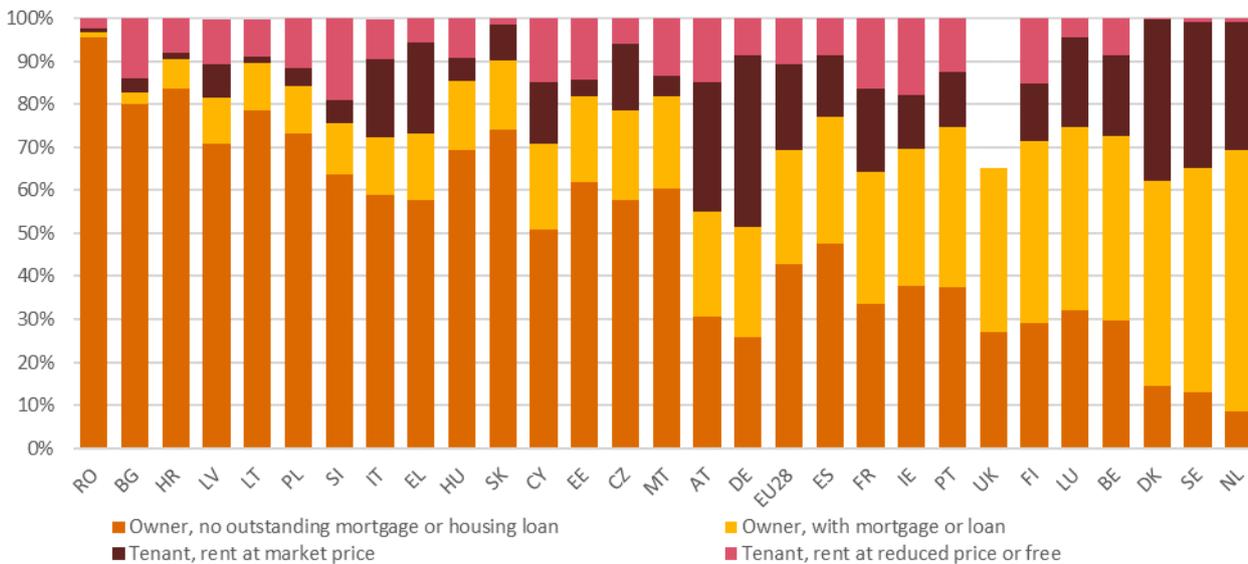
Figure 17: Home ownership rate in the EU-28 in 2017



Source: Eurostat, 2019

Since home ownership by itself is not a sufficient indicator for affordability, considering historical or cultural factors influencing it (see above), the share of ownership, including information about owners with mortgages or loans could be useful to understand the bigger picture. Figure 18 shows the home ownership rate by tenure and accounting for outstanding mortgages and subsidised rents. Considering the historic background of home ownership in Central and Eastern Europe (see Box above), the low share of owners with mortgages or housing loans in that geographic region is not surprising. Accordingly, on the other end of the spectrum, the Netherlands, Sweden and Denmark are the countries with the highest shares of owners with loans. These are also the countries with some of the highest levels of household indebtedness, as housing loans usually constitute the largest part of private debt.

Figure 18: Home ownership rate in the EU-28 by tenant status in 2017



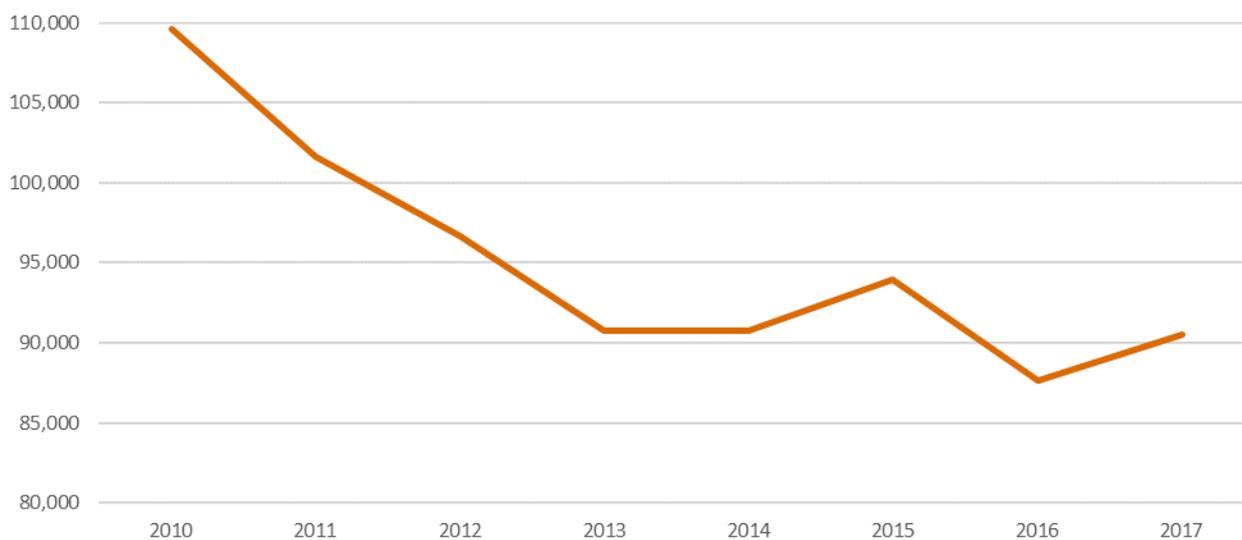
Source: Eurostat, 2019

Note: Part of data for the UK is not available

The general government expenditure on housing and community amenities has been on the decline since 2010, albeit experiencing a recent upward trend since 2016 (Figure 19). This category of expenditure mostly includes spending on housing and community developments, but also water supply, street lighting among

others. While this aggregated average is not telling of the reasons behind such trends, stakeholders may view it in the context of social housing. According to Housing Europe, this is illustrating focus on boosting the construction sector, as well as on home ownership promotion through various incentives, supporting housing demand. Tackling the supply of housing, especially in terms of public housing construction, is perceived as declining⁴⁶.

Figure 19: Average of EU-28 general government expenditure on housing and community amenities over 2010-2017, million EUR



Source: Eurostat, 2019

Housing affordability is a growing issue in some areas of the EU. Housing and inequality are linked, as housing makes up the largest share of wealth across developed economies. At the same time housing cost overburden, overcrowding and the quality of living conditions become increasingly prominent issue. Understanding these indicators, requires looking beyond the total and the average, as break downs by area and income paint a different picture. Households at the bottom 60% of the income distribution and living in urban areas are disproportionately affected by affordability issues and have a lower quality of life. Viewing households within an affordability continuum can help target and design drivers in public policies to ultimately improve living conditions in an inclusive and sustainable way.

⁴⁶ Stakeholder interview, Housing Europe

3.

Drivers for sustainable and affordable housing

The housing affordability in Europe is fostered by several drivers and stimulus. The following section draws on the literature and analysis on affordable housing and sustainability concepts. It starts by discussing sustainability in urban planning, as it has risen to become an overarching aspect of any adequate and forward-looking housing policy. Further in this section, economic drivers are discussed with a focus on monetary, fiscal and financial aspects. The productivity of the sector also has implications on affordability, as well as on sustainability. Finally, sustainable urban mobility is discussed as an integral part of successful urban planning, including housing.

Sustainable urban planning

Sustainability in terms of housing refers to two different concepts: material sustainability and housing as a part of urban development. On the one hand, the physical constitution of a housing unit can be made sustainable by taking circularity of materials, products, equipment and potentially of the whole building, already into account during the design phase. This can be reinforced by using recycled building materials, using lean construction methods, minimising energy use and more. National concepts of sustainable housing include considerations on the reduction of construction and demolition waste from the earliest stages of designing and building.



The decision to build new housing needs to be weighed against the option to refurbish and renovate, thus also mitigating issues linked to land shortages in cities by promoting brownfield developments^{47,48}.

These concepts correspond to a circular economy framework, representing a shift from the traditional linear economic model of consumption, “take-make-consume-dispose”, toward a sustainable system, focused on reducing the use of primary sources, generating savings and reducing negative environmental impacts, mitigating issues linked to land shortages in cities by promoting brownfield developments⁴⁹. Promoting such schemes also needs to include incentives to offset the high costs that such developments would encompass.

Housing is also part of a framework of sustainable urban development. The concept of sustainable development is widely understood as meeting “the needs of the present without compromising the ability of future generations to meet their own needs”⁵⁰. Since its formulation in the late 1980s by the World Commission on Environment and Development to the UN, sustainability as an important dimension to policies has thrived, translating into numerous national, supranational and thematic concepts.

Sustainability is tied to ensuring a “better quality of life for everyone”⁵¹ and involves “economic, social and environmental considerations in ways that mutually reinforce each other”⁵². The European action for

⁴⁷ NBS, Sustainable housing, <https://www.thenbs.com/knowledge/sustainable-housing>

⁴⁸ Umweltbundesamt, Nachhaltiges Bauen und Wohnen, <https://www.umweltbundesamt.de/sites/default/files/medien/publikation/long/3952.pdf>

⁴⁹ ECSO, Trend paper EU construction sector: In transition towards a circular economy

⁵⁰ World Commission on Environment and Development (WCED): Our common future. (The Brundtland Report): Oxford University Press, 1987 <http://www.un-documents.net/our-common-future.pdf>

⁵¹ NBS, UK, Sustainable housing, <https://www.thenbs.com/knowledge/sustainable-housing>

⁵² European Commission, EU approach to sustainable development,

sustainability⁵³ reiterates the EU's commitment to the UN Sustainable Development Goals (SDG), including SDG 11 "Make cities and human settlements inclusive, safe, resilient and sustainable".



Currently 8 out of the top 10 most sustainable cities in the world are situated in Europe – London, Stockholm, Edinburgh, Vienna, Zurich, Munich, Oslo and Frankfurt⁵⁴. The index compares cities by three main dimensions of sustainability, in line with the EU and UN concept – social, economic and environmental. Noteworthy is that these are also some of the most expensive cities in Europe.

Building more sustainably can eventually result in improved affordability⁵⁵. According to the World Green Building Council, sustainable building contributes to the achievement of 9 of the SDGs, including Affordable and Clean Energy, Good Health and Wellbeing and Sustainable Cities and Communities. Buildings consume 40% of the worldwide energy use⁵⁶. The improved energy efficiency of buildings and the use of sustainable technics and materials can result in savings, hence, improve the affordability of housing. Importantly, however, following higher sustainability standards requires substantial upfront costs with the benefits from savings only available in the long term. The use of local renewable energy sources coupled with energy efficiency measures also contributes to energy security. Furthermore, reducing the emissions from buildings can improve the quality of air and reduce pollution, thus benefitting the health of people living in cities

Housing sustainability also involves the dimension of equity, ensuring access to safe, decent and affordable home for everyone. An important differentiation is made between the view of housing as an asset and an issue of economic nature, entailing residential investments, supply and demand forces, toward the notion that housing is not just a building, but also a home. The UN Human Settlements Programme provides an additional dimension to housing – it is part of the cultural "fabric of communities"⁵⁷.

The European Urban Agenda⁵⁸ introduced a common effort between the European Institutions, Member States, European Cities and Stakeholders to deliver a comprehensive urban development strategy. Thematic multilateral partnerships have formulated action plans tackling different aspects of urbanisation, including affordable housing and urban inclusion.

The Housing Partnership Action Plan focuses on cities as 70% of EU citizens live in urban areas. Within its main themes, the Housing Partnership defines 10 areas in line with the social, economic and environmental aspects of a sustainable urban development. Accordingly, a comprehensive strategy for the EU covers environmental aspects (renovation and energy efficiency, land use), social aspects (support of vulnerable groups, spatial planning for inclusiveness, co-management of multi apartment buildings), and economic/financial aspects (rent stabilisation, anti-speculation regulation, innovative funding, state aid, VAT issues related to affordable housing)⁵⁹. Understanding and defining the best approach towards sustainable housing and urban development for Europe involves a holistic approach, considering the many intersections of housing and people in the build environment.

https://ec.europa.eu/info/strategy/international-strategies/sustainable-development-goals/eu-approach-sustainable-development_en

⁵³ Next steps for a sustainable European future European action for sustainability, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A739%3AFIN>

⁵⁴ Arcadis, Sustainable cities index 2018, <https://www.arcadis.com/en/global/our-perspectives/sustainable-cities-index-2018/citizen-centric-cities/#>

⁵⁵ World Green Building Council, <https://www.worldgbc.org/news-media/green-building-improving-lives-billions-helping-achieve-un-sustainable-development-goals>

⁵⁶ BOSS, Sustainable construction, <https://bosscontrols.com/sustainable-construction-reducing-and-reusing/>

⁵⁷ UN-Habitat, Sustainable housing for sustainable cities 2012, <https://unhabitat.org/books/sustainable-housing-for-sustainable-cities-a-policy-framework-for-developing-cities/>

⁵⁸ <https://ec.europa.eu/futurium/en/urban-agenda>

⁵⁹ Housing Partnership, https://ec.europa.eu/futurium/en/system/files/ged/final_action_plan_euaa_housing_partnership_december_2018_1.pdf

Economic drivers

The following section explores the effects of monetary and fiscal policies on the housing market and by extension, on housing affordability. It is important to note that national (or European) economic policies exhibit asymmetric effects within (across) countries, for instance, because of regional differences. Housing markets are in nature local. While housing prices in Stockholm can be on a steep rise, rural Sweden could be recording a long-lasting flattening in price inflation. A monetary measure, however, would affect both regions. The question of house price responsiveness to monetary and fiscal measures is a complex one and for its analysis, we review a sample of existing empirical economic literature on mortgage rates and requirements, as well as on tax incentives for energy efficiency.

As reflected in the Treaty on the Functioning of the European Union, Article 127 (1)⁶⁰, monetary policy's primary objective is to "maintain price stability"⁶¹. In the post-crisis era, monetary measures were put in place with central banks reducing interest rates to zero and below, providing liquidity and purchasing assets on a large scale⁶². Besides from price stability, financial stability is impacted by monetary policy measures. Monetary policy affects money market players in their investment decisions and their propensity to take risks. In fact, studies show that "the implicit promise of a central bank to step in by lowering interest rates and providing liquidity in a crisis increases banks' appetite for risk"⁶³.

This has implications for housing markets. With commercial banks more willing to provide mortgages and with consumers more willing to take mortgages due to favourable interest rates, the financial stability of the economy could be affected with prices rising beyond their fundamental values and borrowers defaulting on credits that were too high for them in the first place. This is where **macro prudential measures** come into play: "Macro prudential instruments include measures such as countercyclical capital buffers and measures that target the demand for credit, say actions aimed at containing exaggerations on the real estate markets. Caps on the loan-to-value or loan-to-income ratios are examples"⁶⁴. In the second part of the section on monetary measures, macro prudential policies targeting the demand for credit are discussed.

Monetary measures

Mortgage rates

The key policy rate of central banks corresponds to the interest rate charged on loans to commercial banks and is a tool used to signal policy developments to money market participants^{65,66}. This interest rate channel can also affect asset markets and thus financial stability. Combined with regulations, such as tightening of credit conditions, for instance, changes initially constrain the supply and demand for credit, cascading down to real estate markets. Investor expectations regarding further price developments can be affected as well. Market correction measures can serve as an indicator for future prices stabilisation and can adjust profit expectations for residential investments, ultimately reducing price volatility in the housing market.

2018 marked the tenth anniversary since the financial crisis, a period of economic recovery and uninterrupted growth for EU economies since 2012. Central banks reacted by sharply cutting interest rates and promoting liquidity into the market to boost demand^{67,68}. Mortgage rates reached historic lows, thus favouring investment in housing (as a commodity, as well as an asset). With the European Central Bank's

⁶⁰ Treaty on the Functioning of the European Union, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT>

⁶¹ ECB, Objective of monetary policy, <https://www.ecb.europa.eu/mopo/intro/objective/html/index.en.html>

⁶² Weidmann, J., Monetary policy after the crisis, <https://www.bis.org/review/r170919b.pdf>

⁶³ Ibidem

⁶⁴ Ibidem

⁶⁵ ECB, Monetary policy instruments, <https://www.ecb.europa.eu/mopo/intro/operational/html/index.en.html>

⁶⁶ Norges Bank (2006): Further information on key policy rate, <https://www.norges-bank.no/en/Monetary-policy/Key-policy-rate/Key-policy-rate---more/>,

⁶⁷ ECB, <https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180606.en.html>

⁶⁸ <https://www.norges-bank.no/en/Published/Speeches/2018/2018-09-25-cme/>

(ECB) quantitative easing policy, the EUR 2.5 trillion bond-buying programme coming to the end as one of the largest crisis-era policies in the Euro zone (launched in 2015), expectations were directed towards a gradual interest rate increase. However, amidst a series of external factors, causing uncertainties in the Euro area, including slower than expected growth in the EU's largest economies, in January 2019 ECB announced delaying the expected rise in rates⁶⁹. This is relevant for housing affordability. Current low interest rates make mortgages more affordable for households, as borrowing becomes cheaper. In 2017, the house price indicator recorded an accelerated increase (+4.4%) in the Euro zone, compared to the previous year (+3.9%). At the same time, income growth was outpaced by the price rise. In this scenario, low interest alleviates to an extent the higher price burden for home buyers⁷⁰. Higher house prices could have positive effects on affordability, as home owners will see their collateral appreciate, thus potentially reducing borrowing costs when housing loans are renegotiated. While the housing cost overburden rate for renting tenants has slightly increased over 2007-2016, according to ECB data⁷¹, this is rather due to a higher share of lower income households in this segment.

In some cases, central banks have used a combination of key policy rate increases and stricter mortgage loan conditions to ensure financial stability. An effect of such measures could be the adjustment of housing prices. As household indebtedness has reached very high levels in several countries in Europe, consequently, central banks have raised concerns regarding financial stability, which could have implications for overall household consumption and general economic growth and may reduce both in the long run. A well-functioning credit market has the potential to enable households to plan its consumption and savings over the horizon of a lifetime, instead of being constraint with the limits of current income. Oppositely, high indebtedness curbs the scope of life choices for a household or a person, such as the freedom or opportunity to make a career change, thus reducing the efficient use and distribution of resources as well as productivity growth over time⁷².

Mortgage conditions

Curbing debt levels by putting caps on loans is a macro prudential policy that came to prominence in the aftermath of the crisis. To ensure macroeconomic and financial stability, national central banks monitor closely household debt to GDP ratios. High levels of household indebtedness make European economies more vulnerable to shocks and can threaten economic growth⁷³. The historically low interest rate environment in the EU, combined with numerous mortgage tax relief schemes, represent a favourable condition for households to borrow and reduce incentives for businesses and people to decrease their debt⁷⁴.

The majority of the EU-28 have mortgage conditions put in place, such as requirements on a maximum loan-to-value (LTV) ratio, debt-to-income (DTI) ratio, borrower's debt-servicing capacity in case of interest rate increase etc.

In 2018, LTV varied largely across Member States, in the case of Denmark, for instance, the country with the highest household debt to GDP ratio in the EU (281% in 2018)⁷⁵, reaching above 90%. Thus, borrowers would be able to receive a mortgage loan equalling 90% of the value of the property and cannot finance the remainder by accumulating debt. While this measure is not binding, the Danish government has introduced an instrument to restrict the number of highly indebted borrowers. Part of a consumer protection legislation, an Executive Order on good practice for mortgage lending postulates that new borrowers with a

⁶⁹ CNBC, ECB's Draghi warns on rising risks to growth amid global headwinds, <https://www.cnbc.com/2019/01/24/ecb-interest-rate-decision-january-2019.html>

⁷⁰ ECB, Recent house price increases and housing affordability https://www.ecb.europa.eu/pub/pdf/other/ebbox201801_03.en.pdf

⁷¹ Ibidem

⁷² Lindquist, K-G., Solheim, H., Vatne, B.H., (2017): Household debt and links to the housing market. Consequences for financial stability. Norges Bank Economic Commentaries 7/2017

⁷³ Dutch Central Banks, Financial Stability Report 2017, https://www.dnb.nl/en/binaries/OFS_Autumn%202017_tcm47-363954.pdf

⁷⁴ Ibidem

⁷⁵ OECD, Household Debt, <https://data.oecd.org/hha/household-debt.htm>

debt-to-income ratio above 4 and LTV above 60% “should have an interest rate fixation period of at least five years and can only obtain deferred amortisation if the interest rate fixation period is 30 years”⁷⁶ Such measures, meant to increase stability and constrain debt, could affect housing prices negatively, slowing down their growth. While mortgage requirements could make it harder, especially for young buyers, to achieve home ownership, they could be favourable for housing affordability overall, slowing down housing price inflation⁷⁷.

Fiscal measures

Fiscal measures for energy efficiency

Fiscal measures have been traditionally employed towards supporting energy efficiency and climate-related policies. The energy efficiency of buildings is an aspect of affordable and adequate housing, since it is related to the long-term costs and quality of a dwelling. Benefits of energy upgrades include increased well-being and health of occupants. Measures typically involve added taxes on energy products, designed to increase their cost and reorient consumers toward the use of more efficient and clean sources or products. Vice versa, policy makers could also choose to promote an energy product by reducing taxes on it and thus the final price for the consumer⁷⁸. Furthermore, fiscal measures could function as subsidies, incentivising the substitution of one type of product with more efficient one. Measures are also combined, with tax revenues channelled toward subsidies, promoting better energy solutions⁷⁹.



Low-income households are exposed to a higher risk of being overburdened with utility bills, including energy. These households tend to inhabit older building stock of lower quality that has often not undergone energy efficiency renovations, including the use of older electrical appliances, contributing to higher energy usage⁸⁰.

Fiscal measures could be instrumental for the initial boost towards an energy transition, which will generate long-term savings, reducing utility costs for households and thus improving affordability and life quality. Low-income households are more likely to ration their energy consumption to save, thus keeping inadequate climate conditions in their dwellings, which could contribute to health problems⁸¹. In this sense, energy upgrades could have indirect savings effect, linked to health care.



The World Bank report on housing affordability underlines that mortgage interest deduction programmes for home owners play a negative role in housing affordability. Empirical literature confirms that unless such programmes target low-income households, they do not actually increase home ownership rates, but rather incentivise owners to buy larger and more expensive dwellings⁸².

This is counterproductive for affordability as it shifts resources away from target groups and contributes to upward price pressures. When designed adequately to target housing affordability issues, mortgage interest deduction schemes can have a favourable effect on supply⁸³. Mortgage deductions, combined with an

⁷⁶ ESRB, A review of Macroprudential Policy in the EU in 2018, https://www.esrb.europa.eu/pub/pdf/reports/esrb~32aae4bd95.report190430_reviewofmacroprudentialpolicy.pdf?29f3196fe6f34fe397f67ce80fa43590

⁷⁷ Norges Bank, Analyses of effects of the residential mortgage loan regulation, https://static.norges-bank.no/contentassets/7dbc1421917c43a7a8a3f67e5f072d37/economic_commentaries_1-18.pdf?v=06/19/2018101557&ft=.pdf

⁷⁸ European Commission, Final Report on fiscal measures used under Article 7, EED, https://ec.europa.eu/energy/sites/ener/files/documents/final_report_on_fiscal_measures_used_under_article_7_eed_0.pdf

⁷⁹ Ibidem

⁸⁰ Moore, T. et al., Benefits and challenges of energy efficient social housing, <https://www.sciencedirect.com/science/article/pii/S1876610217334859>

⁸¹ Ibidem

⁸² World Bank, Living and Leaving. Housing, Mobility and Welfare in the EU, 2018.

⁸³ Department of Finance, Ireland, Financial and fiscal measures for the housing market, http://www.budget.gov.ie/budgets/2017/Documents/Financial_and_fiscal_measures_housing_market_final.pdf

obligation for landlords to rent out their properties to target tenants (tenants, qualifying for social housing, single mothers etc.) could relief demand pressures for that market. This, however, is a short-term solution, as it fails to bring housing stability to target groups. On the long-term, mortgage deduction schemes need to have a smart design, benefitting vulnerable groups and helping them increase their household assets through ownership. The housing continuum framework, discussed in the introduction section to the current report provides an overview of the range of housing needs, corresponding to the specific situation of the household. Ownership in the continuum is a desirable end goal of housing stability, however, not necessarily attainable.

Despite all the benefits, stemming from energy efficiency for the affordability of housing, there are also some challenges. Owners, housing associations and social housing providers struggle to adhere to energy efficiency requirements, which call for higher initial capital costs⁸⁴. Property developers in Germany, for instance, claim that energy efficiency regulations (*Energiesparverordnung*) have pushed prices upwards by 8% on average. A study by the Environmental Agency in Hamburg, however, disputes this, showing that the energy efficiency grade of buildings has no effect on construction costs⁸⁵. More research would be needed, however, to establish the relationship between modernisation costs and subsequent rent increases and specifically whether and when energy cost savings outweigh higher rents.

Fiscal measures for rental policies

Fiscal measures have also been applied to boost the rental supply. Growing the rental sector has been recognised as an important aspect to affordability. The Housing Partnership Action Plan regards rent stabilisation as one of the main factors to affordability, underlining the importance of complementarity between European, national and local policies, tailored to the specific context. According to the Housing Partnership, rent control or rent stabilisation policies could contribute to making price formation transparent and comparable⁸⁶. Research shows, however, that rent control policies could have “an adverse effect on housing market dynamics, increasing the volatility of house prices when facing shocks to the fundamentals (such as shifts in population, household income, residential investment and interest rate)”⁸⁷. Furthermore, too strict rent price regulations can have negative consequences for the housing market: firstly, rental price protection could have a lock-in effect for sitting tenants, whereas the accessibility of the rental market diminishes and people abstain from moving to a dwelling, which might better suit their needs; secondly, it can lead to a push for people, who do not have access to the regulated rental market, to the owner-occupied market, pressuring house prices upwards⁸⁸. Additionally, in the cases of large house price busts, such as in the cases of Ireland, Spain, Denmark and the Netherlands after the crisis, increased rental market flexibility (e.g. easing rent controls) has been found to be one of the measures supporting the adjustment of the housing market⁸⁹. The lack of a well-functioning rental market drives young people to continue living at home with their parents and thus excluding or complicating their accesses to education and job opportunities in economic centres. At the same time, economically dynamic cities tend to incentivise the development of a rental market. Some countries are tackling housing market issues by employing **fiscal incentives for owners to rent their vacant properties**⁹⁰.

⁸⁴ Ibidem

⁸⁵ Focus Online, Stellplatz für 30.000 Euro extra: Was Bauen wirklich teuer macht, https://www.focus.de/immobilien/bauen/stellplatz-fuer-30-000-euro-extra-parkplatz-und-energievorschriften-was-bauen-wirklich-teuer-macht_id_8894652.html

⁸⁶ https://ec.europa.eu/futurium/en/system/files/ged/final_action_plan_euua_housing_partnership_december_2018_1.pdf

⁸⁷ European Commission, Economic Papers 515 | April 2014 Economic and Financial Affairs ISSN 1725-3187 (online) ISSN 1016-8060 (print) Rental Market Regulation in the European Union, http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp515_en.pdf

⁸⁸ OECD, Economics Department, Working Papers no. 1170, A revival of the private rental sector of the housing market? Lessons from Germany, Finland, the Czech Republic and the Netherlands, [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP\(2014\)66&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2014)66&docLanguage=En)

⁸⁹ IMF, IMF Country Report No. 15/1, Housing recoveries: Cluster report on Denmark, Ireland, Kingdom of the Netherlands—the Netherlands, and Spain, <https://www.imf.org/external/pubs/ft/scr/2015/cr1501.pdf>

⁹⁰ Dnevnik, Fiscal law amendments on vacant dwellings, https://www.dnevnik.bg/biznes/2018/09/12/3309759_danuchni_promeni_shte_izvadiat_na_pazara_pusteestite/



In Bulgaria, for instance, an estimated 30% of dwellings are vacant due to demographic changes, depopulation and migration. In the case of the Bulgarian capital of Sofia, this creates a two-fold problem. First, there is a perceived housing shortage, despite a large amount of vacant housing units. Owners' reluctance to rent out is due to insufficient legal protections. Second, owners living abroad and leaving their properties uninhabited do not renovate their apartments, contributing to a worsening state of buildings, including facades in dire need of refurbishing, thus also burdening the cityscape aesthetically⁹¹.

Increasing taxes on vacant and second properties can activate owners to sell or rent out. Such measures could be complemented by reducing VAT for first time buyers or young families, rendering home ownership more affordable. Other positive fiscal incentives are, for instance, advantageous tax exemptions for investors who fund the building or renovation of housing. The French law Denormandie (Loi Denormandie) is an example of such incentive, applying for the renovation of dilapidated housing in French city centres.

Fiscal policies targeting vacant units include higher tax ceilings on rental income for home owners, who rent out a vacant room on their property. Furthermore, tax relief initiatives for refurbishment costs of aging buildings exist, delivering a sustainable element to urban restoration⁹². Policies unlocking the potential of housing vacancies, as well as renovation initiatives, follow a sustainable housing paradigm, as their focus lays on the efficient use and reuse of existing resources, instead of prioritizing the production of new housing, which is linked to further hurdles, as well as time delays to current needs.

Financial instruments – supply/demand side

Shared equity loans

Affordable home ownership schemes target first time home-buyers and people, who do not have a substantial deposit saved or a collateral for a market-rate mortgage. This could include young families or people in the low end or the middle of the income distribution. Generally, making mortgages more affordable could increase the demand for home ownership, which in turn would drive prices up. Existing schemes have received controversial reviews. A “Help-to-Buy” scheme functions with government equity loans and a government approved list of developers, offering new build homes. The aspiring home buyer must provide a cash deposit, set below bank deposit requirements for mortgages. The property value, in turn, cannot exceed a predetermined amount (in the case of the UK, this amount is equal to GBP 600,000 for England or GBP 300,000 for Wales). The government lends a percentage of the property value at a below market rate, with interest not payable for the first five years. In the UK scheme, this represents up to 20% of the property value. The remaining amount of the property price is then financed by a mortgage. The government loan is a subject to a floating interest from the sixth year onwards. The loan must be repaid after 25 years or when the home is sold, with the value of the loan being tied to the current market value of the property⁹³. Such measures could boost affordability, as they support part of the costs for home buyers. Since the measure targets specifically first-time buyers and works with pre-approved developers, it will not affect prices by boosting demand on the overall housing market. In parallel, it could be combined with zoning regulations, requiring a percentage of dwellings in a new development to be dedicated for affordable housing. This concept is known as “inclusionary zoning”⁹⁴. According to Build Europe, however, such

⁹¹ Ibidem

⁹² Department of Finance, Ireland, Financial and fiscal measures for the housing market, http://www.budget.gov.ie/budgets/2017/Documents/Financial_and_fiscal_measures_housing_market_final.pdf

⁹³ Affordable home ownership schemes, <https://www.gov.uk/affordable-home-ownership-schemes/help-to-buy-equity-loan>

⁹⁴ Inclusionary zoning is used to “reduce gentrification and protect the rights of the most vulnerable population around the regeneration site. [It] is a means of using the planning system to create affordable housing and foster social inclusion by capturing resources created through the marketplace. The term refers to a program, regulation, or law that requires or provides incentives to private developers to incorporate affordable or social housing as a part of market driven developments. This can be achieved either by incorporating the affordable housing into the same

schemes, are also criticised as inefficient in their gap funding approach, as they tend to shift the financial burden related to the production of affordable housing units mainly to the buyers or renters on the primary market.

Other privately ran schemes, however, have proven to have negative effects on the overall household wealth after the home purchase. Shared equity loans or shared appreciation mortgages were offered as early as the 1990s by Barclays and Bank of Scotland⁹⁵. Homebuyers are offered an interest-free loan in exchange for share in the gain in the property's value. In the case of rapid price increases, the scheme can end up being more expensive for the borrower, than a traditional mortgage⁹⁶.

Funding affordability

Investments in social infrastructure is crucial for housing affordability and European cities have developed best practices in this respect, combining smart housing policies with innovative financing solutions. According to the Housing Partnership Action Plan (December 2018), in the period 2011-2017, the European Investment Bank (EIB) invested EUR 9.5 billion in social and affordable housing in 19 member states. It faced challenges in the remaining countries particularly in terms of lack of robust housing policies, regulatory frameworks and financial structures. Overall, social infrastructure investments have decreased by 20% since 2009 in the EU. This includes spending on social housing. A 2018 study estimates the investment gap for affordable housing to be around EUR 57 billion annually⁹⁷.

Box 1: Housing Fund of the Republic of Slovenia

The Housing Fund of the Republic of Slovenia was established in 1991 and operated by the Ministry of the Environment and Spatial Planning. The role and objectives of the fund changed over time, reflecting the changing socio-economic context of the Slovenian economy, towards a market-based economy. Since 2015, the Housing Fund is the main state authority for the implementation of the national housing policy, financing and implementing the national housing programme, and for promoting housing construction, and the renovation and maintenance of apartments and houses. It was hence established to create the conditions to secure enough quality housing, facilitating housing access, especially for the young and young families⁹⁸.

The Housing Fund collaborates with private sector actors, as well as public institutions and bodies at the Fund and project levels in its different fields of activities, with a view to contribute to i) achieving the social, economic and urban development of the state and; ii) the improvement of existing or the development of new regulations in the field of housing⁹⁹.

The Housing Fund carries several activities, including i.a.

- providing long-term loans with favorable interest rate to material persons and legal entities for the acquisition of non-profit rental housing and for the acquisition of their own apartments and residential buildings through purchase, construction, or for maintenance and reconstruction of apartments and residential buildings;
- encourages various forms of ensuring owned and rented apartments: with rent purchase of apartments and renting them out, with the sales of apartments in form of leasing, with co-investments with public or private investors; and

development, building it elsewhere, or contributing money or land to produce social or affordable housing in lieu of construction.”, In: Inclusionary Zoning, World Bank, <https://urban-regeneration.worldbank.org/node/46>

⁹⁵ Financial Times, Be aware of risks of shared-equity mortgage schemes, brokers say, <https://www.ft.com/content/c1479364-9d89-11e0-9a70-00144feabdc0>

⁹⁶ Ibidem

⁹⁷ European Commission, ELTI, Boosting Investment in Social Infrastructure in Europe, 2018, https://ec.europa.eu/info/sites/info/files/economy-finance/dp074_en.pdf

⁹⁸ See more information at: <http://www.housingeurope.eu/member-1134/housing-fund-of-the-republic-of-slovenia>

⁹⁹ Ibidem.

- deals with real estate business with the purpose of ensuring public interest
- carries out other legal tasks and tasks for the implementation of the national housing programme¹⁰⁰.

As a result, the Housing Fund of the Republic of Slovenia, Public Fund successfully manages over 3,432 of its own rental apartments for the needs of non-profit and affordable rental throughout Slovenia, as well as an additional 304 apartments of operators in free use for the requirements of the non-profit rental¹⁰¹.

Box 2: Social impact bond

Social Impact Bonds (SIBs) are innovative financial instruments, designed to channel private investments toward policy targets, aiming for positive social (and/or environmental) impacts. SIBs leverage capital from investors and expertise from service providers to address and finance welfare services related to societal needs and support high impact social programmes (public safety, chronic homelessness, affordable housing, among others). The repayment of the principal, contrary to traditional bonds, is not guaranteed, rather it depends on the project objectives achieved (called “payment by result” or “payment for success”). The results, assessed by an independent third party should result in savings for the government that can cover the repayment of the initial investment, provide returns on investments and achieve cost savings for the public sector, compared to the alternative cost without the implementation of the project. SIBs often finance pilot projects and if successful can be replicated on a larger scale^{102,103}.

First launched in 2010, 108 SIBs came to existence by 2018, spanning over 24 countries. While they have been in use for employment programmes in the Netherlands, integration projects in Finland, SIB have been employed to deliver housing solutions in the US and Australia for instance^{104,105,106}. To address a challenge in a community, governments use a service provider that has the expertise required to implement a solution. Jointly, a “payment by outcomes” structure is defined to measure the success of the project to be launched. Private investors are then involved and lend money up-front to finance the project, managed by a project manager dealing with day-to-day operations of the service provider’s programme. Independent evaluators assess the programme’s effectiveness based on the pre-agreed metrics. Based on the achieved impact, the government pays back the mandated project-manager and charges to him to repay investors.

The programme impacts should result in savings for the public sector with respect to the initial cost of the service and provide investors with a return as a reward of the risk. Currently, EFSI (European Fund for Strategic Investments) pilots a Payment-by-Results instrument, fostering the development of social impact investments in Europe and supporting the scaling-up of social entrepreneurs¹⁰⁷. This scheme, however, is fairly new, and more experience is needed to understand the best practices for SIBs and ensuring their functioning.

¹⁰⁰ See more information at: <https://ec.europa.eu/docsroom/documents/30677/attachments/2/translations/>

¹⁰¹ See more information at : <http://www.housingeurope.eu/member-1134/housing-fund-of-the-republic-of-slovenia>

¹⁰² Ibidem

¹⁰³ European Parliament, Briefing 2014, <http://www.europarl.europa.eu/EPRS/538223-Social-impact-bonds-FINAL.pdf>

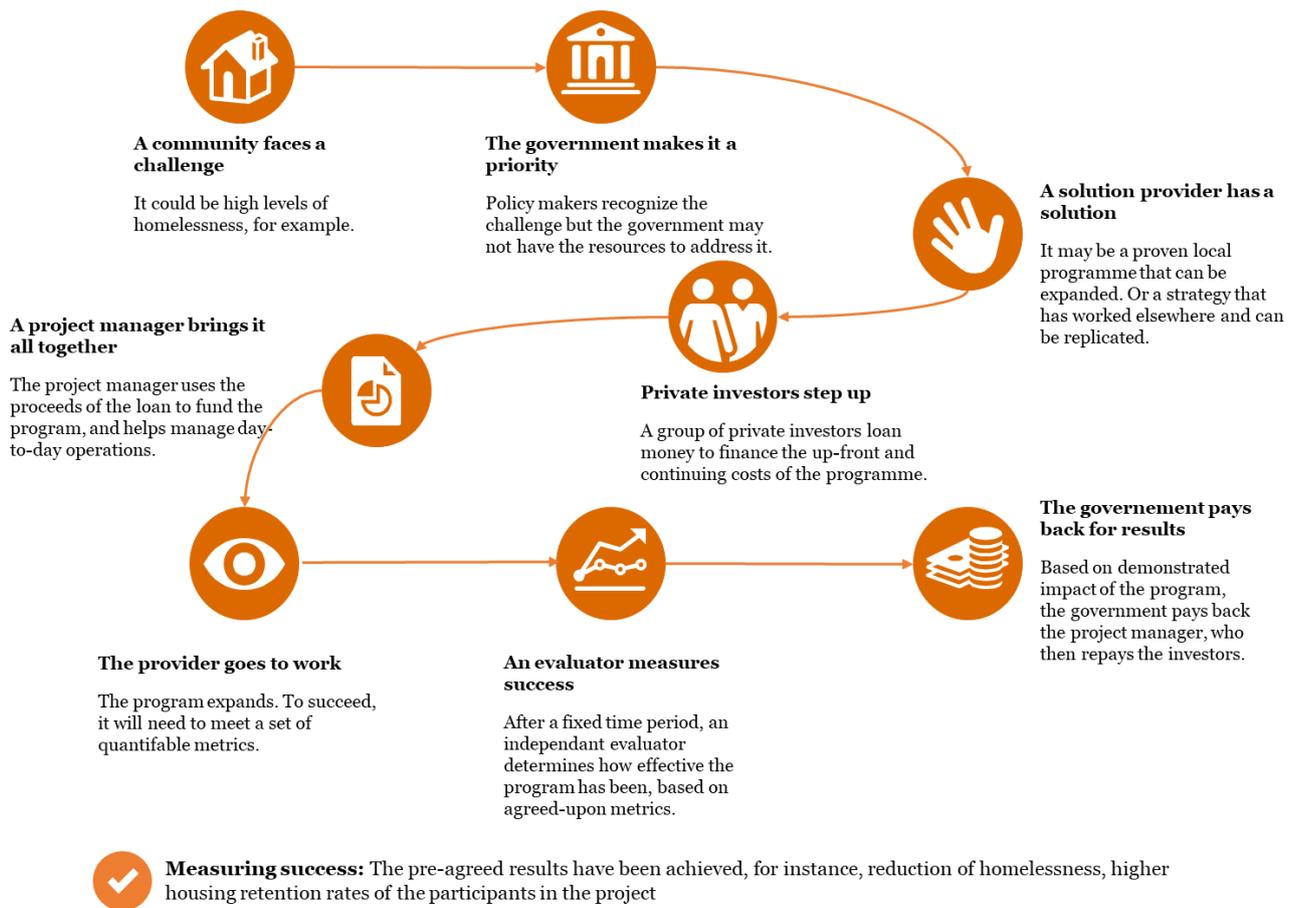
¹⁰⁴ Reuters, Cities experiment to reduce homelessness with "pay for success" finance, <https://www.reuters.com/article/us-usa-finance-social/cities-experiment-to-reduce-homelessness-with-pay-for-success-finance-idUSKBN1FL65R>

¹⁰⁵ European Parliament, Briefing 2014, <http://www.europarl.europa.eu/EPRS/538223-Social-impact-bonds-FINAL.pdf>

¹⁰⁶ European Commission, ELTI, Boosting Investment in Social Infrastructure in Europe, 2018, https://ec.europa.eu/info/sites/info/files/economy-finance/dp074_en.pdf

¹⁰⁷ European Commission, EFSI in the social sector, https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan-europe-juncker-plan/investment-plan-results/efsi-social-sector_en

Figure 20: Social Impact Bonds



Source: PwC, based on Goldman Sachs, 2014

Productivity of the construction sector

Digitalisation and the adoption of new technologies by the construction sector hold the promise of increased productivity and, as a consequence, reduction of construction costs.



Technological solutions are already adapted to serve the sector, in particular, Building Information Modelling (BIM), 3D scanning and printing, drones and more. Surveys show that professionals see savings potential not only for the construction companies, but for the whole life-cycle of the built assets. This can ultimately reduce the price of new residential constructions and positively affect affordability.

Pilot projects across the EU show that the use of BIM and 3D printing results in time savings for the construction process and ultimately in a cheaper dwelling than traditional methods allow. In Nantes, France, for instance, a family became the first inhabitants of a 3D printed house, which was realised as a collaboration between the city council, a housing association and the local university. The project saw a 20% reduction of costs, compared to a traditional house of the same size and took only 54 hours to build. Additionally, 3D printing offers the opportunity to use a wide range of materials, which could be complemented by recycled ones, thus contributing to sustainability of housing¹⁰⁸.

¹⁰⁸ ECSO, Integrating digital innovations in the construction sector, Trend paper, 2018

Mobility and transportation

Mobility and transportation are vital aspects of sustainable urban planning. **Understanding the interconnectivity of mobility and housing requires a holistic view of urban development that accounts for the benefits of viewing both aspects into an integrated framework.** The development of the transport systems affects the patterning of housing developments and vice versa. Mindfully approached, with simultaneous consideration of their effects, both are important dimensions of a comprehensive urban development strategy.

Reduced commuting times result in less pressure on demand for scarce urban space and play a role in lowering carbon emissions, improving air quality in cities and decreasing traffic accidents¹⁰⁹. On the other hand, when transportation networks are not designed inclusively, they can marginalise neighbourhoods, affecting their growth and housing market, and minimising the quality of life of the residents. Thus, transport infrastructure affects both housing affordability and life quality. Low-carbon infrastructure is an important environmental aspect in a multi-scale framework of a sustainable housing policy. Typical approaches for a sustainable urban transport sector include incentives to reduce driving, parking and land use management and alternative transport options¹¹⁰.

It is worth noting that several European cities lead the way globally in terms of sustainable urban development, prominently including transportation in their way forward.

The city of Copenhagen, Denmark, is set to become the first carbon-neutral capital in the world by 2025. This is achieved by applying a holistic strategy, involving building retrofitting, circular economy concepts for waste management and improved public and transport infrastructures. Besides from improving the quality of life and health of citizens, the approach creates opportunities for innovation, jobs and sustainable growth¹¹¹.

¹⁰⁹ <https://www.drammenskonferansen.no/wp-content/uploads/2018/03/Housing-and-Mobility-John-Whitlegg-1.pdf>

¹¹⁰ UN-HABITAT (2012) Sustainable Urban Energy - <https://unhabitat.org/books/sustainable-urban-energy/>

¹¹¹ City of Copenhagen, Carbon neutral capital, <https://international.kk.dk/artikel/carbon-neutral-capital>

4.

Obstacles to improve housing affordability and sustainability

While most EU MS recognise affordable quality housing as a key concern and priority, several systemic socio-economic issues remain. Building on existing research, this section considers specifically some of the main cross-cutting economic and non-economic barriers affecting the development of affordable housing in Europe. These range from state regulations, and insufficient investment in affordable housing to horizontal issues such as transport and energy costs and construction market challenges.

State regulation of housing markets

Rental market regulations, ease of registering property and quality of land administration are key regulations that affect the responsiveness of housing supply.

The rental market regulations refer to the rent control (the level at which rent is set) and rent stabilisation (regulating how the rent is raised over time). There are two main types of rental regulations: the first one being the hard or first-generation rent control, (which often stands for the freeze of nominal rents), and the soft or second generation rent control. The latter regards the automatic rent increase percentage related to the inflation rate. In addition, the rent increase would differ between new and existing contracts; and it is often embedded in an additional set of regulations regarding tenant security, housing quality, conversion, home improvement and maintenance, and landlord–tenant relations¹¹².



According to a recent World Bank report, the more restrictive rent regulations are, and the less responsive housing supply is. For example, while the Danish rent regulations are rather strict, those of Slovenia are rather market-based (and hence its responsiveness of housing supply is higher). In Germany, decreasing the rent control to the average level in the OECD would result in 1.4% increase of residential mobility¹¹³.

Karver et al. (2018) note that “creating security of tenancy and avoiding market segmentation between existing and new tenants while ensuring landlords’ property rights can help mitigate rental market inefficiencies and correct for market failures without contributing to housing market imbalances”. Their analysis suggests that easing rental market regulations can create incentives to invest in residential properties and facilitate a more responsive supply side, thus fostering mobility and improving affordability^{114,115,116,117}.

¹¹² Haffner, Elsinga & Hoekstra (2012). Access and Affordability: Rent Regulations. https://www.researchgate.net/publication/286296489_Access_and_affordability_Rent_regulation

¹¹³ OECD (2011). Housing and the Economy: Policies for Renovation.

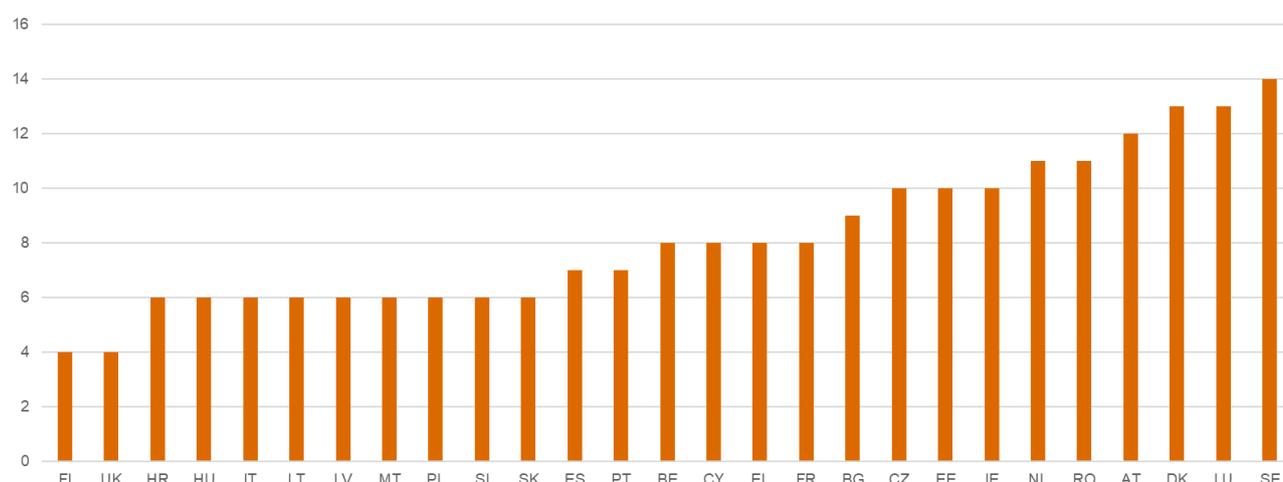
¹¹⁴ World Bank (2018). Living and leaving. Housing, Mobility and Welfare in the European Union.

¹¹⁵ European Commission (2014). Rental Market Regulation in the European Union. Economic Papers 515 | April 2014.

¹¹⁶ OECD (2014). A revival of the private rental sector of the housing market? Lessons from Germany, Finland, the Czech Republic and the Netherlands. Economics department working papers no. 1170.

¹¹⁷ IMF (2015). IMF multi-country report housing recoveries: cluster report on Denmark, Ireland, Kingdom of the Netherlands—the Netherlands, and Spain. IMF Country Report no. 15/1

Figure 21: Rent Control Indicator in Selected EU Countries, 2018



Source: World Bank, 2018

Rental market regulations need to be balanced between too flexible and restrictive, and be grounded within the local institutional, socio economic and political context.

In addition to rent regulations, the ease of registering property and dealing with construction permits, as well as the quality of land administration affect the responsiveness of housing supply¹¹⁸. The less procedures are needed to register a property, and the higher the quality of administrations is (reducing uncertainties), the higher the responsiveness of housing supply will be. By maintaining housing price to reasonable levels, this will benefit to the residential mobility of households, including youth. The box below illustrates some of the actions a government can implement to simplify building procedures.

In order to counteract this issue of cumbersome regulations, the Swedish government amended the Planning and Building Act in 2013, aiming to simplify and streamline the planning and building process. Among others, the amendment introduces a standard procedure for drawing a development plan. Furthermore, it attempts to limit the ability of municipalities to introduce stricter technical requirements than those stipulated by the Swedish National Board of Housing, Building and Planning, thereby trying to reduce the burden on residential construction. Also, the transparency in the allotment of land at local level has been made slightly more transparent with the adoption of guidelines for land allocation (Swedish Code of Statutes SFS 2014:899), whereby the municipalities need to outline basic conditions for land allocation.

Another area where governments can have a major impact in boosting affordable housing is in unlocking land supply¹¹⁹. Indeed, finding land in an adequate location is one of the most crucial steps in developing successful affordable housing. In this context, adequate location refers to location that is well connected with the transport infrastructure (to allow reasonable commuting time), and that includes enough educational and health infrastructures. This is important especially as available (and cheaper) land is often located in peri-urban areas. In addition, providing access to land can significantly help to attract private sector investments, including those of developers and affordable housing providers.



More flexible land use planning policies need to be in place to address some of these issues and boost land supply for affordable housing.

Recently, several cities such as Barcelona, Paris or Lille have put in place a 30% quota of affordable housing on all new-build homes and major renovation projects. In Barcelona, this was accompanied by a Preferential

¹¹⁸ Schuetz (2007). Land Use Regulations and the Rental Housing Market: A Case Study of Massachusetts Communities.

¹¹⁹ McKinsey (2014). A blueprint for addressing the global affordable housing challenge.

purchase right, giving the administration preferential purchase rights on plots of land and buildings¹²⁰. In turn this contributes to the development of economically and socially-mixed communities.

In some cases, land scarcity or land shortage is an issue. In Luxembourg, for instance, a major issue is to identify and mobilise land for affordable housing provision, pushing the government to put in place relevant regulations to boost land supply^{121,122}. In Ireland, the government started addressing this issue through the work of the Land Development Agency. The latter is in the process of identifying sites, including sites in public ownership that housing associations can get access to¹²³. This will contribute to the goals of the National Planning Framework which has targets to grow each of the main urban centres.

Too strict rental regulations, coupled with low quality of land administration, and cumbersome property registration processes **slow down responsiveness of house supply and contribute to housing price increase,** thus preventing the development of affordable housing. However, a smart trade-off between strict and flexible regulations, tailored to countries' socioeconomic context, need to be struck. In flexible-supply countries, housing investment adjusts more rapidly to large changes in demand – but this in turn may generate more cyclical swings in economic growth (OECD, 2011). Reforming land supply and other regulations linked to the housing market is not only a technical and economic exercise but is also highly political.

While regulations -especially on land use, are applied nationally; national, regional and local governments may play different roles, have different responsibilities and respond to different incentives.

Land use governance varies across Europe, with most countries characterised by a hierarchical system – i.e. one where lower level plans (local) need to comply with higher level ones (national and/or regional). For example, the Netherlands apply such an approach whereby national and provincial governments exert a strong influence on local plans. In other countries like Poland or Germany, local governments have a high degree of autonomy in regards with land planning¹²⁴.

However, if there is some form of coordination mechanisms between the different levels of governance, they are often limited in scope. A recent study from the OECD points out to the fact that if the development of land creates costs but no benefits for local governments, they are likely to prohibit most of it (e.g. affordable housing). On the other hand, if one of the main sources of income of local governments come from tax revenues, they may very well favour one type of development (commercial). Therefore, the OECD recommends that National governments should take these incentives into account when designing their fiscal and land use planning systems. Otherwise, misguided incentives may cause local governments to pursue planning policies that lead to rising housing costs or suburban sprawl.

The political economy of housing

A recent stream of literature has been focusing on the political economy of the housing market, with a view to highlight some of the factors and actors' interests, incentives, and constraints that shape housing affordability issue. Because housing development does not bring certain, uniform and equal benefits (and costs) to all stakeholders, some of these may try to block reforms – whether linked to land supply, house supply or even rental market.

¹²⁰ See more information at https://www.barcelona.cat/infobarcelona/en/organisations-and-political-groups-reach-an-agreement-to-allocate-30-of-all-new-homes-as-protected-housing-2_711671.html

¹²¹ European Construction Sector Observatory (2019) Country Fact Sheet Luxembourg. Upcoming.

¹²² Housing Europe (2017). The State of Housing in the EU 2017

¹²³ Ibidem

¹²⁴ OECD (2017). Land-use Planning Systems in the OECD. https://read.oecd-ilibrary.org/urban-rural-and-regional-development/land-use-planning-systems-in-the-oecd_9789264268579-en#page29

Boosting housing affordability is not a merely technical exercise and requires strong political will and alignment.

In the UK, three issues undermining reforms to boost housing supply were identified by Coehlo and Ratnoo (2014). First, rising numbers of owner-occupiers, and rising house prices from the late 70s onwards, have shaped electoral preferences about home ownership and (opposition to) development. Second, as housing wealth has increased, the health of the UK financial sector has become inextricably intertwined with the macro-economy, limiting the scope for fast, radical reform. Third, successive governments have struggled to find ways of ensuring regional/national planning co-ordination while preserving local democratic legitimacy¹²⁵.

It also implies that policies should not only reflect the desirable outcome, but also take in to account feasibility and timeline of policies. For instance, though coordination between national and territorial institutions is needed for the implementation of affordable housing policy, it will be challenging in practice, as they have sometimes confronting incentives and objectives. So, the question is, what is the best mechanism for collaboration between national and local institutions? Where do their interests converge to incentivise such collaboration? These questions are equally relevant to a different set of actors, ranging from home owners to renters and workers. In turn, this may help address this issue of housing affordability on the longer-term. However, such an approach requires extensive research and analysis, coordination efforts, long-term vision, policies and strategies, and hence significant time and resources.

Although the long-term interests of opposing stakeholders may block reforms aiming to boost housing affordability, their interests may align on addressing short-term issues - directly or indirectly linked to housing affordability.

Insufficient investment in affordable housing

European governments have decreased their share of expenditure on housing and community amenities to 0.6% of their GDP in 2017 (i.e. EUR 91 billion). This is less than in 2010, when such a share stood at 0.9% and EUR 109.6 billion. In addition, the construction sector as well as the new supply of social housing was affected in many countries by austerity measures and the overall decrease of investments in and production of housing/building following the 2008 financial crisis: for instance the production of public housing in Italy went from 9,000 in 2005 to 4,600 in 2014, while it fell from 15,000 to 2,500 in Spain during the same time period¹²⁶¹²⁷.

Governments have hence limited means to finance social and affordable housing, and hence need to exploit and attract private sector investments in the affordable housing supply.



Private investors can invest through equity, rent and mortgage payments in affordable housing with the help of a government subsidy. In this model, private developers, with the financial and/or non-financial support of governments, build affordable housing, which is sold to consumers, purchased by the government for allocation to citizens, or operated as rental property.

However, market conditions, and especially a low return on investment, are not conducive to attract the private sector, preventing the latter to invest in affordable housing. This is explained by the fact that rents of

¹²⁵ Coehlo & Ratnoo (2014). Political Economy of Housing in England. <https://www.instituteforgovernment.org.uk/sites/default/files/publications/Political%20Economy%20of%20Housing%20in%20England%20231014F1.pdf>

¹²⁶ See more information at [https://ec.europa.eu/eurostat/statistics-explained/index.php/Construction_production_\(volume\)_index_overview](https://ec.europa.eu/eurostat/statistics-explained/index.php/Construction_production_(volume)_index_overview)

¹²⁷ UN (2018). Report of the United Nations High Commissioner for Human Rights. E/2018/57, available at <https://undocs.org/pdf?symbol=en/E/2018/57>

units in affordable housing developments are always below market levels¹²⁸. This in turn, makes risk (of not generating a good enough return) higher.

As explained by Witwer (2007): “as real estate developments require a considerable amount of investments and are affected by many different forces, many, which are beyond the control of the developer, risk for most developments are generally high. For affordable housing projects, the risk is even higher as the potential to receive a lower return on the investment is greater because sale and rent prices are generally fixed and cannot adjust to changing market conditions”.

To boost private sector investments in affordable housing, governments have come up with several types of support to lower the cost of affordable housing. These include fiscal and/or financing mechanisms including de-risking, guarantees, or subsidies for developer financing (see Table 1 below). For example, the French government, through the Finance Act of 2014, provides private sector social housing providers a reduced rate of VAT to 10% as well as exemption from property tax for 20 years in return for a commitment to rent these units at 20% lower than market value for 15 years¹²⁹. In the case of Germany, private sector participation in the provision of affordable and social housing is everything but new. For instance, in 2015, over 20,000 affordable housing were built in Berlin, because of a planning guidance stating that 25% of a scheme over 25 units should be available at below-market prices¹³⁰.

Table 1: Possible incentives for great private sector involvement in affordable housing.

Form of incentives	Short Term	Long Term
Regulatory measures	Density Bonusing	
	Alternative Development Standards	
	Inclusionary Zoning	
Fiscal measures	Housing Allowances and Rent Supplements	Tax Amendments
	Tax Amendments	Tax Credits
	Land Contributions	
	Direct Subsidies	
Financial measures	Reduction or Waiving of Municipal Fees	Lending & Borrowing Practices
		Socially Responsible Investment
		Philanthropy
		Sponsored Investment Funds
Institutional measures	Streamlining the Planning Process	Housing Trusts
		Land Trusts
Complementary measures	Rehabilitation of Existing Stock	Education & Awareness
		Measures Social Enterprise

Source: Witwer, 2007

However, such a collaboration in practice is more challenging, and there are several trade-offs to be **stroke**. For example, in the UK, private sector participation in affordable housing was possible but it targeted affordable but not social housing. Private sector may also add further requirements, such as minimum rates of return and exit routes to minimize their risks and ensure a certain profit margin.

¹²⁸ Witwer (2007). An untapped resource: encouraging private sector engagement in affordable housing

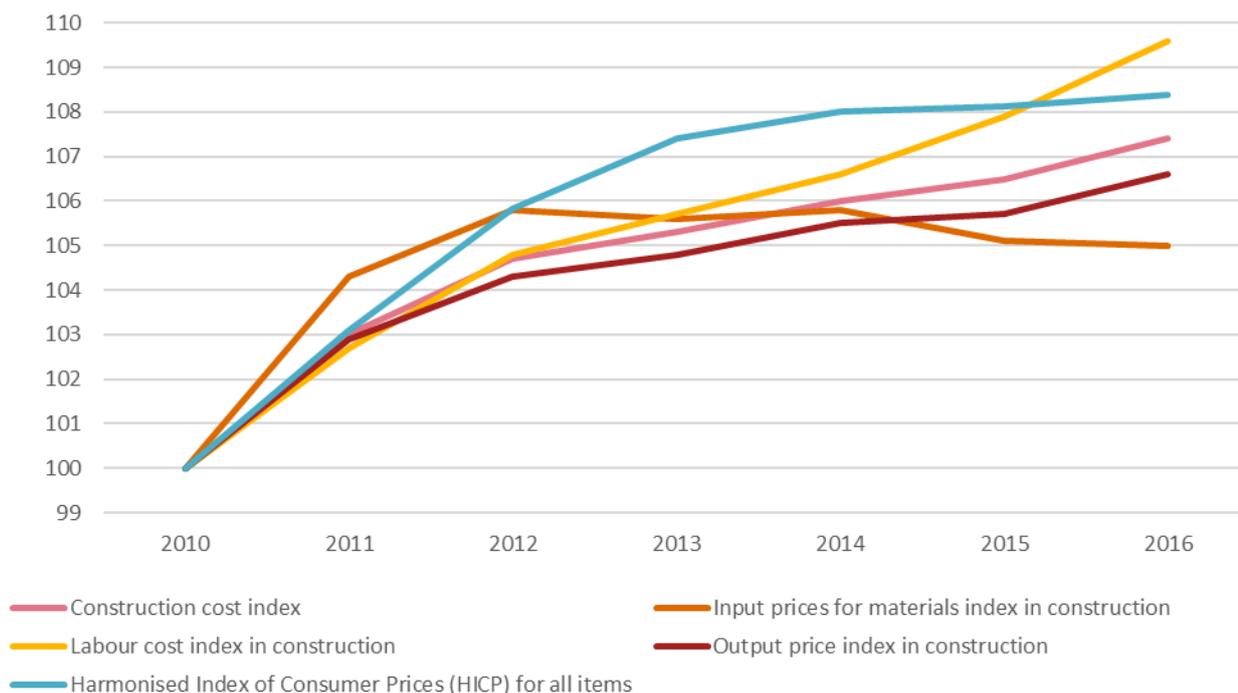
¹²⁹ See more information at https://www.ef-l.eu/assets/170721-CBRE-Affordable-Housing-ViewPoint_Secured-1.pdf

¹³⁰ Ibidem

Construction costs

Affected by low productivity, the construction sector is challenged in providing affordable housing. While digital innovations are slowly making their way into the sector, its labour productivity remains one of the lowest among all economic sectors. Over the past two decades, the labour productivity has grown at around a quarter of the rate in manufacturing (1.0% vs. 3.6% respectively)¹³¹. In addition to low labour productivity, the construction sector is also challenged by increasing construction costs – though their rise is overall below the Harmonised Index of Consumer Price (HICP). Among all construction costs, the one related to labour is the one that increased most (see Figure 22 below).

Figure 22: Construction costs index in the EU 28 between 2010 and 2017 (2010 = 100)



Source: Eurostat, 2018



While the price of construction materials and output price index have increased (partly due to increasing building standards and regulations)¹³², the growth of construction costs is driven by a 9.6% increase in labour costs since 2010. The latter may very well keep on increasing in the near future as the construction sector faces important workers and skills shortages¹³³.

¹³¹ European Construction Sector Observatory (2019). BIM in the EU construction Sector. Upcoming.

¹³² Housing Europe (2017). The State of Housing in the EU 2017

¹³³ Ibidem

In addition, the price of land (which is included in the output price index in construction) has also increased – especially in cities. In fact, while the price of land represents in average 15-20% of construction price, this share is higher in urban areas¹³⁴. Overall, these increasing costs may contribute to making it challenging for the construction industry to sustain the low price of housing, which support lower-income population in purchasing dwellings.

Transport and energy costs, and split incentives

While energy and transport costs have a significant impact on residential mobility and housing affordability, they are often overlooked¹³⁵. Energy costs have become an increasingly important share of households' expenditures over the past decade in Europe, driven by a growth in energy prices and energy consumption for domestic use¹³⁶. Poor quality housing and aging of the housing stock is often linked to poor energy efficiency, and hence affect significantly households' energy consumption. In Europe, more than 87 million people live in a poor-quality dwelling¹³⁷, and where the average age of housing stock is over 30 years (see Figure 8).



With an annual renovation rate of 1%, and structural barriers such as split incentives households' expenditure on energy may very well keep on increasing, impeding the development of affordable housing¹³⁸.

Split incentives could prevent the implementation of energy efficiency measures in residential construction. Split incentives happen when those responsible for paying energy bills (the tenants) are not the same entity as those making the capital investment decisions (the landlord or building owner). This may translate into a situation where the “landlord may not be inclined to make the necessary upgrades to building services when the benefits associated with the resulting energy savings accrue to the tenant”¹³⁹.

Other costs, e.g. relates to transportation or accessibility, are often overlooked when it comes to housing affordability¹⁴⁰. In 2017, households in the EU spent 13.0% of their total consumption expenditure on transport – being the second largest households' expenditure after housing. This is similar to the 2010 level (12.8%)¹⁴¹. This share even reached over 16% in Lithuania and Slovenia in 2017, while it stood at only 7.9% in Slovakia.

13%
share of households' expenditures on transport in the EU in 2017

¹³⁴ Stakeholder Interview, Housing Europe

¹³⁵ See more information at <http://monash.edu/research/city-science/htaffordability/>

¹³⁶ See more information at https://www.researchgate.net/publication/265059299_HOUSING_AFFORDABILITY_IN_THE_EU_Current_situation_and_recent_trends [accessed Mar 12 2019].

¹³⁷ Ibidem

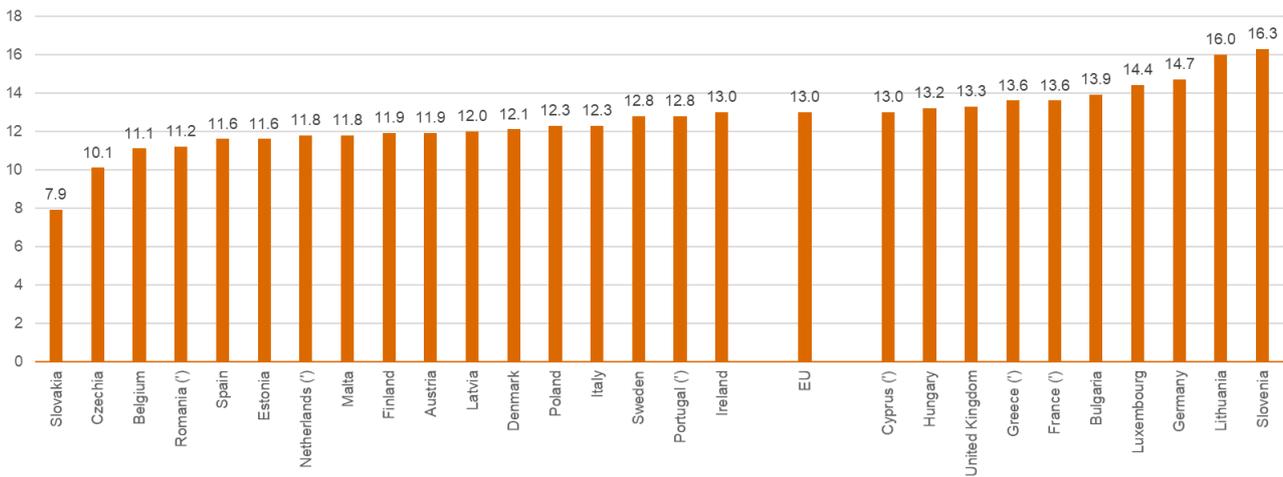
¹³⁸ European Construction Sector Observatory (2018). Improving Energy and Resource Efficiency. Analytical Report.

¹³⁹ HVAC, HESS (2013). Factsheet Overcoming Split Incentives. <https://www.environment.gov.au/system/files/energy/files/hvac-factsheet-split-incentives.pdf>

¹⁴⁰ See more information at <https://www.sciencedirect.com/science/article/abs/pii/S0966692317303228>

¹⁴¹ See more information at https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Evolution_of_household_expenditure_by_consumption_purpose_-_COICOP,_EU-28,_2008-2017,_share_of_total.png

Figure 23: Share of transport in total households' expenditure in the EU 28 in 2017, %



Source: European Commission, 2018.

Though transport costs have remained stable over the years, they play a key enabling or blocking role when it comes to the access to better jobs and residential mobility. While this is not specifically new, policy-makers still rarely address the issues of transport (and energy) costs, sustainable urban planning and housing affordability in an integrated and holistic manner (see more details in the section on Policy initiatives). Yet, improving transport infrastructures and linking better cities to peri-urban areas has a different impact on workers and homeowners.

The implementation of holistic policies always required complex coordination of several sectoral (e.g. transport, urban planning, affordable housing, energy) policies and stakeholders. While this is needed to ensure coherence, synergies and complementarities, each of the policy are often led by different ministries, with different objectives and priorities. To add in more complexity, such coordination should also take place at different levels: from the local/territorial to the national level.

5.

Policy initiatives

To provide solution for the obstacles mentioned above and to foster the identified drivers for affordability and sustainability, countries implement numerous policies. The range of policies varies widely across countries and according to the objectives and targets of the introduced measures. This section aims to provide examples of policies on affordable housing and on sustainable urban development in order to analyse different approaches and best practices.

Policies on affordable housing

The demand for affordable housing in Europe is continuously growing and EU MS are increasingly implementing measures to address their citizen's needs. In addition, policies favouring affordable housing are handled at the national and regional level, which explain the numerous differences when comparing policies across MS.

Four main categories of affordable housing policies stand out when conducting an analysis across the 28 European MS:

1. Policies favouring the acquisition of affordable housing, targeting home owners and home buyers;
2. Policies aiming at promoting rentals of affordable housing;
3. Policies impacting the housing supply by investing in the construction of social housing;
4. Housing allowances for economically deprived households are granted, mainly implemented through direct subsidies and often directed to specific group of persons or communities such as elderly, homeless people, migrants or ethnic communities, such as the Roma.

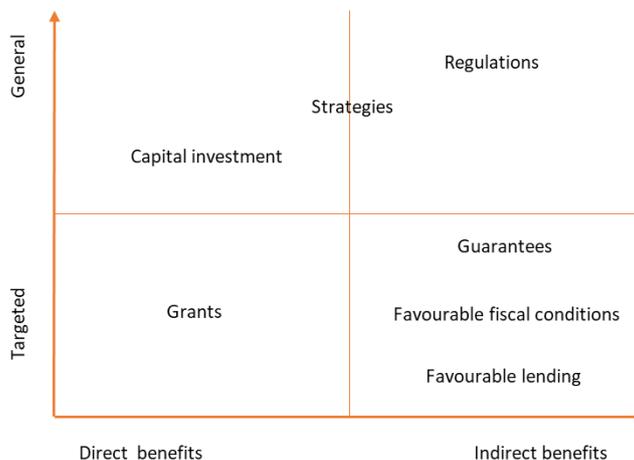
Policy interventions, falling into the different categories above, are implemented by several instruments. Policies could provide direct benefits such as grants or subsidies directly allocated to individuals or families as well as direct funding in the form of e.g. public investment in residential construction. Policies could also allocate indirect benefits such as favourable fiscal conditions, favourable lending conditions, guarantee benefits or new regulations. In this context:

- **Grants** refer to direct financial contributions and could be seen as financial compensations for the high market prices. Those subsidies are often granted as monthly subsidy;
- **Public investments or Capital Investments** refers to states major investments. Often allocated in millions of euros they represent important funds allocation for major projects;
- **Favourable fiscal conditions** represent tax advantages and are often allocated as a tax relief for owners renting their dwellings or mortgage tax relief for buyers for instance;
- **Favourable lending conditions** gather all the policies encouraging individuals to take loans. Those could take the form of low interest loans or long periods granted for the reimbursement for instance;
- **Guarantees** refer to financial instruments covering risks of capital losses;
- **Regulations** are implemented to protect tenants or to provide a regulative frame for the types of policies mentioned above.

MS could also implement broader initiatives on affordable housing development by defining strategies and action plans at countries level. This would for instance be the case in Spain with the launch of the new State Housing Plan 2018-2021 launched in March 2018. The plan focuses on facilitating access to decent and affordable housing. The scheme also supports houses and buildings rehabilitation or urban and rural areas

regenerations. Figure 24 provides an overview of the different types of policies according to the type of impact they provide. Strategies and action plans combine numerous instruments to serve their main objectives.

Figure 24: The different types of policies presented according to the benefits they provide



Source: PwC

Table 2 reflects on the types of policies implemented across EU MS for each category of policies (i.e. home ownership policies, rental policies, social housing policies and housing allowance policies). Analysis confirms that policies that facilitate access to affordable housing for home owners and home buyers result in indirect benefits, with an important majority of policies providing favourable lending and fiscal conditions. Policies favouring rental of affordable housing mainly refer to grants and capital investment. When it comes to social housing, direct funding is the most commonly used measure to promote access to affordable housing, whereas housing allowance policies are mostly supported by grants.

Table 2: Type of policies enforced for each of the four main categories of policies, classified per country

Country	Home Ownership and Home Buyers	Rental Policies	Social Housing Policies	Housing Allowance
Austria				
Belgium				
Bulgaria				
Croatia				
Cyprus				
Czech Republic				
Denmark				
Estonia				
Finland				
France				
Germany				
Greece				
Hungary				
Ireland				
Italy				
Latvia				
Lithuania				
Luxembourg				
Malta				
Netherlands				
Poland				
Portugal				
Romania				
Slovakia				
Slovenia				
Spain				
Sweden				
United Kingdom				
Grants	Loan	Fiscal	Guarantee	
Regulatory	Capital investment	Strategy		

Source: PwC analysis based on ECSO deliverables

The following sections analyse the different control levers for affordable housing in Europe, and present examples of successfully implemented policies in the MS.

Policies favouring the acquisition of affordable housing

Policies targeting home owners and home buyers account for the biggest number of policies among the four identified categories of policies. All EU MS besides Slovenia implement policies targeting directly home ownership. Existing programs favouring the acquisition of affordable housing are mainly supported by indirect benefits policies, while some EU MS provide direct benefits policies, in the form of grants and capital investment.

Among policies providing indirect benefits but also among all the four identified categories of policies, favourable lending and fiscal conditions to favour the acquisition of affordable housing are the most commonly used policies in the EU.

An example of favourable lending condition programme would for instance be the Zero-Interest Loan Programme (Prêt à taux zero – PTZ) implemented in France, supporting people who want to buy their first dwelling or wishing to buy an existing dwelling which requires major works. The programme grants eligible individuals with a zero-interest loan. The scheme is also applicable to projects aiming at the conversion of non-residential units into housing units. Similarly, in 2016 in Hungary, the government implemented the Family Housing program (*Csok*) to support families in the purchase of newly built properties. Families may apply for loans of up to HUF 10 million (around EUR 31,900) at a preferential interest rate of 3%¹⁴². A similar example could be the enforcement of the State Housing Development Fund (SHDF) in Slovakia, where the government decided to grant low interest loans for the construction of rental dwellings and refurbishment of the housing stock.

Box 3: The State Housing Development Fund in Slovakia

The State Housing Development Fund has been implemented in the Slovak Republic in 1996 to improve the housing stock and answer to the demand in affordable housing, through the use of preferential loans. Over time, the SHDF also became an important tool for energy efficient construction and renovation.

Favourable loans could be provided to private individuals, municipalities or legal entities, supporting the construction or renovation of buildings or could be granted for the rent or the purchase of dwellings. **The primary beneficiaries of the programme are the private residents benefiting from the favourable lending conditions**, but also the construction industry seeing an increase in the demand and more recently, the environment, thanks to the increase in renovations.

An important characteristic of the scheme is that it evolved over time, shifting its focus from increasing the building stock to renovating buildings in the past recent years. The SHDF also provides funds from two EU-funded Programmes, the JESSICA (Joint European Support for Sustainable Investments in City Areas) and the IROP (Integrated Regional Operational Programme).

Over the years, the SHDF became more independent from the state budget but more reliable on EU Funds. Therefore, due to the increased EU funding in the scheme, it has incentivised the country to use EU funds in the form of loans. **On the environmental impact, the SHDF could become one of the biggest contributors to energy savings in the country**¹⁴³. Finally, the fund also had a deep positive impact on the housing market, renovating 25% of the housing stock up to 2018¹⁴⁴.

¹⁴² Ministry for National Economy, A stable budget and predictable economic policy enable the Family Housing Programme. February 2016. <http://www.kormany.hu/en/ministry-for-national-economy/news/a-stable-budget-and-predictable-economic-policy-enable-the-family-housing-programme>

¹⁴³ Slovakian Government, Annex 1: Evaluation of energy efficiency measures for 2014-2016, n.a. <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficiency-directive/national-energy-efficiency-action-plans>

The first lesson learned is the fact **that favourable loans could be both financial and political successful instruments**. The fund is taking independence from the state budget and has led the Slovakian government to set priorities to help the most deprived. The second important lesson learned regards the ability of the Fund to change its focus and target over time, proving to be flexible and responsive to the external environment and policy priorities. The third important lesson learned regards **the implementation of the EU programmes through existing national institutions**. From the customer perspective, **the increased demand from the consumer side is an indication of the general interest**. In addition, the digitalisation of the loan request has led to 825 applications filed electronically (whereas 819 in hard copies). Nevertheless, it has been outlined that public loans could in some cases crowd out private capital.

Fiscal advantages are also widely used to promote home ownership and acquisition in the EU-28. Notably, the reduction of the VAT rate for the purchase or the construction of a new dwelling is commonly implemented. The Luxembourgish government, for instance, enforced a “super-reduced” VAT rate of 3%¹⁴⁵, instead of the standard 17% on construction and renovation of dwellings. The government of the United-Kingdom followed a quite similar path, implementing the Help to Buy: Individual Savings Account scheme. The initiative encourages first-time buyers with a tax-free saving account and a government bonus. First time buyers can deposit GBP 1,200 (EUR 1,400) in the first month and up to GBP 200 (EUR 232) in the following months. In doing so, households will earn interest on their deposit, and the government additionally provides a 25% bonus up to GBP 3,000 (EUR 3,482) on the savings accumulated when beneficiaries decide to purchase their first home¹⁴⁶.

To favour the development of home ownership, including affordable housing, the state can also support the purchase or the construction of housing through providing guarantee on mortgages. An example of this initiative could for instance be the Housing Guarantee Programme in Latvia (*Mājokļu galvojumu programmu*). Indeed, the state scheme supports the purchase and/or construction and renovation of the first home for families with at least one child, who have a stable income but who do not have enough savings for an initial down payment. The state provides guarantees on mortgages. The amount of the guarantee depends on the number of children. Since its enforcement, the scheme has provided 6,888 housing guarantees, for a total value of EUR 44.8 million¹⁴⁷. Moreover, it impacts the mortgage lending market, with a 50% increase of the total volume of new loans attributed to the scheme in 2016. Due to its popularity, the government approved the continuation of the scheme in October 2017.

However, whereas governments implement numerous policies to favour the access to ownership of affordable housing, regulations have also been enforced, mainly to reduce the risk of indebtedness, to avoid credit-driven increases in house prices and to prevent possible housing bubble.

This has for instance been the case in Ireland where the Central Bank of Ireland decided to implement measures to i) limit the loan-to-value (LTV) ratio to 80% for non-first time buyers and 90% on the first EUR 220,000 of the value of the property for first-time buyers (LTV of 80% applies to any value above)¹⁴⁸; and ii) include loan-to-income limits. The latter seemed to have had an impact on the market by capping mortgage borrowings at a level below what can be afforded when compared to what is being paid in rent. Similar

¹⁴⁴ Ad-hoc Working Group for Housing systems in transition, Final Report, 2018

https://ec.europa.eu/energy/sites/ener/files/documents/sk_annual_report_2018_en.pdf

¹⁴⁵ Ministry of Housing, Remboursement de la TVA Logement ou application directe du taux super-réduit. http://www.ml.public.lu/fr/aides-logement/fiscalite/tva_logement/index.html

¹⁴⁶ Help To Buy, Help to Buy: ISA. <https://www.helptobuy.gov.uk/help-to-buy-isa/how-does-it-work/>

¹⁴⁷ Ministru Kabinets, Valdība akceptē mājokļu atbalsta programmas paplašināšanu. October 2017.

<http://www.mk.gov.lv/lv/aktualitates/valdiba-akcepte-majoklu-atbalsta-programmas-paplasinasanu>

¹⁴⁸ Central Bank of Ireland, New regulations on residential mortgage lending. January 2015.

<http://www.centralbank.ie/stability/MacroprudentialPol/Pages/LoantoValueLoantoIncome.aspx>

regulations have also been implemented in Sweden and in Finland. This shows that cross-sectoral policies need to be carefully coordinated and balanced through a smart regulatory mix.

Based on the analysis provided in the current report, of home ownership schemes (including affordable housing) aim, but do not necessarily reach the population belonging to the first three income quintiles. Policies that focus on providing favourable loan conditions are reaching higher income quintile population (e.g. Q4). In turn, this may drive the price of housing up by providing more payment capacity to the group of population that can already afford the housing. This hence suggests that even though lending and fiscal policies are the most commonly used policies for home ownership, they may not be appropriate for lower revenue income quintiles. At the same time, it should be noted that if well-structured, coordinated and integrated, lending and fiscal policies focusing on homeownership could both stimulate home ownership and rental accommodation, which may benefit then to the first three income quintiles.



To provide affordable home ownership, policies could do more in targeting people whose revenues are too high to benefit from social housing but too low to buy properties on the private market. This has for example been implemented in France with the Revival Plan for the Construction Sector. The government forecasts the construction of 35,000 such dwellings by 2019. The rents of intermediate dwellings are 15-20% below market price, with their purchase prices also being lower¹⁴⁹.

Policies providing direct benefits such as direct subsidies paid to individuals are another instrument used by policy-makers to favour the home ownership. While not as common as policies providing indirect benefits, EU MS also allow direct financing to support home acquisition.

Grants could for instance be allocated to promote home acquisition. This is for instance the case in Cyprus, with the Self-help Housing Programme on Private Land/Repair of Residence. The initiative covers part of the beneficiaries' construction costs of building their own house on their own land. The amount of the grant varies according to the size of the household, income and size of the property. Another example of grants promoting home acquisition could be subsidies encouraging the purchase of the rent dwelling. Such initiatives have been previously implemented, and notably in Malta with the Sir Sid Darek (*Become the owner of your home*) scheme. It encourages tenants of social houses belonging to the Housing Association to purchase the property they rent.

Finally, the state develops action plans and strategies to support home ownership for its citizens. In the UK for example, the government assigned GBP 1.4 billion (EUR 1.6 billion) to help local authorities and housing associations to build 40,000 affordable homes for purchase or rent¹⁵⁰. Similarly, in Belgium, the region of Brussels Capital decided to invest in the building of 6,720 social and medium-sized houses to rent and purchase.

Key takeaways:

1. Policies favouring home acquisition are mainly oriented towards the implementation of policies promoting indirect benefits such as favourable lending or fiscal conditions;
2. Those policies are not progressive and therefore mainly favour individuals belonging to higher income quintiles at the expense of lower income quintiles;
3. Policies providing grants and subsidies for home ownership support lower income quintiles.
4. The policies could benefit from more holistic vision. This would lead to maximising the synergies and cumulative impact on affordability and sustainability of housing.

¹⁴⁹ Ministère du logement et de l'habitat durable, La construction de logements. January 2017. <http://www.gouvernement.fr/action/la-construction-de-logements>

¹⁵⁰ Financial Times, UK's housing shortage targeted with £3.7bn for new homes. November 2016. <https://www.ft.com/content/089f8448-b192-11e6-a37c-f4a01f1b0fa1>

Policies favouring the rent of affordable housing

To address the shortage of affordable housing in Europe, another possibility, besides the promotion of favourable policies for home acquisition, consist on stimulating the rental housing market. Again, policies boosting the rental market are handled at the national and local level. While there are several policy initiatives examples across the EU-28, it is important to mention the two main levers that impact rental prices for citizens. First, member states can boost the rental supply by implementing favourable investments conditions in the rental market, which in turn will decrease rental prices on the market. Second, EU MS could influence rental prices by providing direct funding or subsidies to beneficiaries (from the first three income quintiles) thus filling the gap with market prices.

Rental housing policies are more progressive and therefore enable to also target lower income quintile of the distribution.

Whereas the indirect benefits policies are less used for the housing rental market compared to the home acquisition market, they are still more used than in the two last categories (i.e. social housing policies and housing allowance policies). Indirect benefits policies mainly target the construction and the increase of the supply of the rental market.

One of the most commonly used indirect benefits policy to improve the housing rental market are those promoting favourable fiscal conditions.



These are in fact the most represented indirect policies for the rental market. An example could be the new tax measures implemented in Italy. The government provided a 25% discount on the IMU and TASI tax for houses being let on an 'agreed rental contract' (*canone concordato*)¹⁵¹. This is a contract, which complies with the trade associations' ("associazioni di categoria") minimum and maximum rents and have a minimum period of three years plus two years of automatic renewal.

Furthermore, the Maltese Housing Authority adopted the Renting to help out scheme (*Nikru biex nassistu*). This initiative aims to incentivise owners of vacant properties to rent them out to the Housing Authority and make them available on the social housing market for ten years. In turn, property owners adhering to the scheme benefit from an exemption from the tax due on the rental income.

Attractive lending conditions to favour the supply of the rental market are also implemented in the EU-28 countries. For instance, in Ireland, the government implemented an initiative called "Stabilising Rents, Boosting Supply" to incentive landlords to rent their property for a period of three years. In turn, landlords benefited from an increase in the available deduction of mortgages interest from 75% to 100%¹⁵². This measure was also taken as lending conditions for buy-to-let mortgages under the macro-prudential rules in Ireland are much stricter than for first-time buyers or movers.

Guarantees programmes for the development of the rental offer are also implemented by MS. For instance, in the Czech Republic, guarantees are issued for the repayment of investment loans for the construction of rental housing and associated infrastructure. Nevertheless, this instrument is not commonly used, Czech Republic being the only country implementing it.

Finally, regulations are also enforced to protect tenants of rental housing. In Portugal, for instance, amendments of an existing law (*Novo Regime do Arrendamento Urbano – NRAU*) in 2017, increased the protection of tenants by extending the period that landlords need to wait before being able to increase the rent (from 5 to 8 years for low-income tenants and from 5 to 10 years for tenants over 65 years or over 60%

¹⁵¹ FIRST, Tasi e Imu 2016: scade la seconda rata, ma la prima casa non paga. December 2016. <http://www.firstonline.info/News/2016/12/15/tasi-e-imu-2016-scade-la-seconda-rata-ma-la-prima-casa-non-paga/NDVfMjAxNi0xMi0xNV9GT0w>

¹⁵² On the other hand, it is important to note that landlords are not permitted to deduct many of their other expenses relating and so statistics from the Residential Tenancies Board show a decline in the number of landlords in the Irish market.

disabled)¹⁵³. Comparably, in Germany, a tenant protection law (*Mieterschutzgesetz*) has been implemented in January 2019. It also includes modifications in the rental price break. From January, only 8% (instead of 11%) of the modernisation costs can be allocated to the annual rent¹⁵⁴.

Direct benefit policies are the main instruments used to leverage the housing rental market. They vary from support of low-income segments in covering a part of rent to promoting the financing of rental residential construction. Numerous grants programmes are introduced to favour affordable housing on the rental market, namely in 12 out of the 28 EU-countries.

Allocated grants can enable to reduce the cost of rent for the beneficiaries and to support families or individuals facing difficulties in paying their rents.

In Italy, the government created the National fund to support access to rented properties, by providing a subsidy that equals the difference between social housing rent and the rent actually paid by the beneficiary for his/her dwelling. For the 2017-2019 period, EUR 90 million will be allocated to the Fund¹⁵⁵. In the same way, the Ministry of Housing of Luxembourg increased its support to tenants by providing a subsidy to households paying a rent over 33% of their disposable income. In 2018, conditions to apply for this subsidy were further simplified, with beneficiaries becoming eligible when paying a rent over 25% of their disposable income.

Budget allocated to Italian National Fund between 2017 and 2019



MS could also directly invest in financing rental constructions. Such programmes often target households with incomes too high for social housing but too low to rent dwellings at the market prices. In Denmark, the government allocated DKK 30 million (EUR 4.0 million) to carry out tests for the conversion of disused non-residential buildings (for example, retail spaces, former railway stations) into new rental dwellings. The fund covers up to 100% of the expenses incurred by municipalities¹⁵⁶. Similarly, in Slovenia and in Romania, the government invests in the construction of rental dwellings, focusing on young people between 18 and 35 years old in Romania, and on young, families and elderly in the case of Slovenia. Another example would be the “Social market programme” in Portugal (*Mercado Social de Arrendamento*). The scheme allows the rental of repossessed properties at a 20% to 30% lower price than the regular market.

Box 4: Apartment Plus in Poland

Apartment Plus is an initiative launched to increase the availability of the supply of affordable rental on the market. The scheme target individuals or families unable to rent apartments at the market rates. The programme provides apartments to rent and ‘to rent with the option to buy’. Apartment Plus aims to supply 100,000 apartments by the end of 2019.

To improve the construction process and to build faster, cheaper, but with an improved quality, government needs to support private investors and local governments. Indeed, the focus is on accelerating administrative procedures, unblocking the supply of land for housing investments and rationalising building regulations. Moreover, to reduce construction costs, the scheme promotes modern

¹⁵³ *Diario de Noticias, Conheça as alterações ao Novo Regime do Arrendamento Urbano que entram hoje em vigor. June 2017.*

<http://www.dnoticias.pt/pais/conheca-as-alteracoes-ao-novo-regime-do-arrendamento-urbano-que-entram-hoje-em-vigor-FD1555052>

¹⁵⁴ Die Welt, Das ändert sich für Deutschlands Mieter <https://www.welt.de/finanzen/immobilien/article184544380/Neues-Gesetz-Das-aendert-sich-fuer-Deutschlands-Mieter.html>

¹⁵⁵ EdilTecnico, Detrazioni fiscali 2017 in Gazzetta, le novità della Manovra Finanziaria. December 2016. <http://www.ediltecnico.it/51415/manovra-finanziaria-in-gazzetta-detrazioni-fiscali-2017-casa-novita/>

¹⁵⁶ Danish Transport, Construction and Housing Authority, 30 mio. kr. til forsøg med billige boliger. January 2017.

<http://www.trafikstyrelsen.dk/DA/Presse/Nyhedsarkiv/Bolig-og-byfornyelse/2017/01/30-mio-kr-til-forsog-med-billige-boliger.aspx>

and technological construction solutions.

Cooperation with private investors is contractually conducted by PFR Nieruchomosci (PFRN) and is based on three possible cooperation models¹⁵⁷:

- Purchase of land (including building permit with a project, or building conditions, etc.);
- Purchase of land and financial assistance for investments under construction and
- Purchase of investments¹⁵⁸.

If the scheme is becoming popular among municipalities, only 30% of the apartments have already been through the pre-investment phase and are ready for development¹⁵⁹. Nevertheless, changes in legislation and the enforcement of the programme have reduced the risks associated with the non-payment of the rents. **This could therefore increase funding from housing investors.**

The Apartment Plus Programme seems to have a positive impact on the housing market in Poland, playing a key role in providing affordable housing in Poland. However, some important challenges also emerged. First, the lack of land availability for housing is a key challenge. The cost of land, driven by its lack of availability, reduce potential investments in its development. The slow and complicated administrative and legal procedures could also represent an obstacle in lands housing development. Finally, involving numerous actors with deep expertise on housing development could enable to resolve and anticipate potential problems in such projects.

Policies on public ownership of social housing

The two last categories of policies (i.e. social housing policies and housing allowance), are targeting lower income quintiles and are therefore mainly constituted of direct benefits policies, with an important majority of policies promoting funding in dwellings.

Only a few policies with indirect benefits are implemented to promote social housing. The main reason is that social housing is often financed directly by the state through major capital investments in constructions and indirect benefits (e.g. fiscal or favourable lending) does not effectively serves the needs of lower income segments.

Guarantees are used as a lever in three countries, namely the Netherlands, Finland and Estonia. This instrument is used to cover the risks against capital losses arising from loans for housing association lower income segments, as well as housing associations or municipalities. In the Netherlands, the Social Housing Guarantee (WSW) provide guarantee on loans to housing associations for social housing projects. However, two Dutch housing associations defaulted on their borrowings and this resulted in a EUR 350 million loss for WSW, equalling to over 50% of its risk capital¹⁶⁰. In Finland, the Housing finance and development centre (ARA) provides state guarantees on loans to municipalities, local authorities and eligible corporations for the construction and purchase of social housing. Finally, in Estonia, the Apartment Building Loan Guarantee (*Korterelamulaenu käendus*) is designed for and support associations wishing to take out a loan for the reconstruction/renovation of the apartment building.

In the EU-28 countries, several member states such as Austria, Czech Republic, Finland, France, Sweden, Germany and Denmark have introduced favourable lending condition policies to support social housing¹⁶¹.

The policies support investments from municipalities such as in Czech Republic where the loan programme aims to cover the costs associated with repairs and modernisation of apartments. In France, the Caisse des

¹⁵⁷ Mieszkanie Plus, Przedsiębiorcy: <https://mieszkanieplus.gov.pl/przedsiębiorcy/>

¹⁵⁸ ECSO, PFS, Apartment Plus Poland

¹⁵⁹ ECSO, PFS, Apartment Plus Poland

¹⁶⁰ S&P Global Ratings,

https://www.wsw.nl/fileadmin/user_upload/Nieuws/RatingsDirect_ResearchUpdateDutchSocialHousingGuaranteeFundWSWOutlookRev...pdf

¹⁶¹ Housing Europe (2018). The financing of the renovation in the social housing sector.

dépôts offers several instruments aiming to boost the production, acquisition and renovation of social housing¹⁶².

In Denmark, it is the National Building Fund (*Landsbyggefonden*), which aims to support and develop public housing through loan schemes. In Finland, ARA also grants municipalities, local authorities and eligible corporations state guarantees on loans and payment of interest subsidies for the construction and purchase of social housing.

Belgium is the only country using fiscal advantages to promote social housing. Since January 2017, several public companies and agencies are recognised by Belgian VAT authorities as social housing companies. These benefit from a reduced VAT of 12% for the purchase and construction of social housing¹⁶³.

Direct benefits policies are the main instruments used by EU MS to develop social housing. In fact, 17 out of the 28 European countries provides direct **capital investment** for social housing investments. This mainly refers to the funding of constructions, renovations and/or conversions of non-residential buildings into social dwellings. For instance, Belgium launched a reform of the public housing sector in 2017, aiming to build 6000 new public dwellings, in addition to the housing alliance which focuses on the renovation of social housing buildings with a EUR 3.0 million budget over 2014-2017¹⁶⁴. In Ireland, the government launched the “Rebuilding Ireland – Action plan”. This plan aims to deliver 47,000 new social homes by the end of 2021. In Lithuania, municipalities in major cities are involved in the Social Housing Development Program, which aim to renew 500 dwellings and build an additional 1,105 for social housing purposes (see more details in Box 5)¹⁶⁵. Numerous examples of social housing funding could be found as seen in Table 2. However, France and Hungary implemented slightly different measures.



In France, in addition to the national fund set up to finance the construction of social housing units, there is an obligation for municipalities to achieve a 20-25% share of social dwellings in the new housing stock by 2025¹⁶⁶.

In Hungary, the National Asset Management Company (NAMC) can purchase a certain number of foreclosed properties with non-performing loans, offering the former debtor the option to rent the dwelling at a reduced rent. By the end of 2014, NAMC purchased almost all the planned 25,000 housing units, paying the banks 35-55% of each property’s market value, as indicated in the original contract between the bank and the mortgager. The capacity of the NAMC has been expanded to 35,000 dwellings¹⁶⁷.

Box 5: Municipal Social Housing Development Action Plan in Lithuania

To increase the social housing offer on the market, the government implemented the Municipal Social Housing Development Action Plan aiming initially to provide 1,150 housing units by 2020. From a National Audit published report it was outlined that, to increase affordable housing the best solution was to buy and renovate apartments rather than construct new social housing. Therefore, many municipalities decided to give the priority to buying and renovating apartments and the total number of housing units increased to 1,203 renovations and 718 new builds (1,921 in total)¹⁶⁸.

¹⁶² See more information at <https://www.banquedesterritoires.fr/toutes-nos-offres>

¹⁶³ EY, Belgian draft legislation on social housing: expansion of the reduced 12% VAT rate to the private sector, 2017. <http://www.ey.com/be/en/newsroom/news-releases/tax-alert---belgian-draft-legislation-on-social-housing>

¹⁶⁴ European Commission, National Reform Programme 2016. April 2016. http://ec.europa.eu/europe2020/pdf/csr2016/nrp2016_belgium_en.pdf

¹⁶⁵ Veidas.lt, Ką pakeis 1105 naujų socialinių būstų?, December 2016. <http://www.veidas.lt/tag/socialinis-bustas>

¹⁶⁶ Municipalities may be exempted of such an obligation if i) there is insufficient public transport linking the municipality to jobs (for municipalities of less than 30,000 inhabitants); ii) the demand for social housing is weak (for municipalities over 30,000 inhabitants); iii) over 50% of the urbanised territory is inconstructible.

¹⁶⁷ Commission Staff Working Document, Country Report Hungary 2016 Including an In-Depth Review on the prevention and correction of macroeconomic imbalances. February 2016.

¹⁶⁸ ECSO, Policy Fact Sheet Municipal Social Housing Development Action Plan

If the scheme is still being implemented (final date extended to 2023), some challenges could already be outlined. Indeed, if to buy and renovate apartments is most cost-effective than the construction of new-dwellings, this approach presents some limitations. First, eligible apartments for the renovation need to be found. Apartments in high demand areas are usually priced higher. In addition, old apartments most of the time present poor energy efficiency levels. Finally, those apartments to be renovated are also rarely equipped for people with disabilities.

Key lessons learned:

The main important dimension is to ensure that a national strategic plan has been established in anticipation to the implementation. This would enable a coherency in the implementation of the scheme. Moreover, if the renovation of old buildings enables to deliver more social housing units than expected new apartments are better equipped for disabled people and energy efficiency results. The difficulty to find apartments to buy and to renovate could also be a brake in the continuity of the project. Deep socio-economic assessment should be conducted prior to the projects to understand the needs of the citizens and energy efficiency should stay as a priority. **Finally, implementation plans must be carefully established to ensure successful and transparent processes.**

The grants allocated to promote local and national governments support the supply of social housing are provided to municipalities, association corporations, cooperatives to promote the by investing directly in the construction and renovation of their apartments and/or buildings. Six out of the 28 European Countries are implementing such policies. In Estonia, the Reconstruction grant is available to associations and cooperatives wishing to reconstruct their apartment buildings and can cover up to 40% of the total cost of the construction¹⁶⁹. In 2017 in Sweden, the government granted a subsidy to 199 municipalities to increase housing constructions. Similarly, in Luxembourg, in Finland, in Denmark and in Estonia, grants were allocated for the construction and renovation of social housing.

It is also important to mention the key role of housing association in the Netherlands – a country often presented as an example for its important stock of social housing. Around 75% of the 3 million rental homes in the Netherlands belong to these associations¹⁷⁰. However, because the social housing sector is so large, its inefficiencies prevent a more efficient functioning of the whole housing market putting price pressure on the remaining market segments¹⁷¹. In fact, the Commission adopted its Decision of 15 December 2009, recently upheld by the CJEU, to emphasise the need for reforms in the Netherlands housing market. This shows that housing needs to be thought from a holistic manner.

Housing policies for the most deprived

Housing allowances are allocated for specific defined population groups. Generally, the targeted individuals from those types of policies are the individuals who could not benefit fully from the categories of policies mentioned previously. Those policies often target the lower quintiles of the income distribution.

The only indirect benefits measure implemented by EU MS in the context of housing allowance is the favourable lending conditions. However, those are only applied in two countries, in Czech Republic and in the Netherlands, and policies are directed towards specific population groups. In Czech Republic, the government implemented the Rental housing programme, providing loans to municipalities, legal or natural persons. Nevertheless, loan conditions only favour specific categories of persons: senior, disabled, limited income citizen, victims of natural disaster or young people under 30 years. In the Netherlands, specific loans are provided to low income earners and people receiving benefits.

¹⁶⁹ KredEx, Reconstruction grant. <http://kredex.ee/en/apartment-association/toetused/rekonstrueerimise-toetus/>

¹⁷⁰ Ministry of the Interior and Kingdom relations: Housing and renting: <https://www.government.nl/topics/housing/contents/rented-housing>

¹⁷¹ See more information at <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-netherlands-en.pdf>

Grant allocations are the most commonly used instruments for housing allowances. They mainly target homeless, elderly, disadvantages beneficiaries, disabled individuals, and war veterans with disabilities or really low-income earners.

In Austria for instance, the government provides grants to elderly to help them to adapt their home to their physical needs. Similar policies are also implemented in Finland, in Sweden, in Belgium, in the Czech Republic and in the Netherlands. Home adaptation grants policies are also targeting disabled individuals and war victims in several European countries. Some countries, such as Spain also enforced policies to provide rental aid. This is the case of the new state housing plan, providing rental aid for elderly people. In Greece, the government decided to provide assistance to individuals and households in needs through benefits such as free electricity connection, food subsidies and tax-free rent subsidies. Countries such as Finland and Poland also implemented programmes to support migrants. For instance, in Poland, the government set up the “Sheltered housing” (*“Mieszkanie chronione”*), which is a form of social assistance for individuals in difficult situations and which prepares them, under the supervision of specialists, to lead an independent life. This programme has been set up for individuals with mental disorders, minors, refugees and foreigners, who obtained subsidiary protection in Poland. In Finland, and through the State Housing Fund, the state grants subsidies to support programmes offering advices to address long-term homelessness, immigrant housing, and housing for vulnerable categories.

Capital investments and the major strategies/action plan for housing allowance mainly refers to the state investment in building construction and renovation of housing for the most vulnerable individuals.



In Germany, the government provided EUR 1.0 billion annually between 2016 – 2019 to social housing projects supporting families, students, pensioners and refugees. To handle the refugee crisis, the KfW, the German development finance institution, allocated EUR 1.0 billion to communes setting up housing for refugees in 2015. The German case hence illustrates how the state and development finance institutions can collaborate to tackle the issue of affordable housing.

Similarly, in Denmark, the government allocated DKK 150 million (EUR 20.1 million) for the establishment of temporary housing and renovation of suitable empty buildings for refugees. Some countries also enforced favourable funding policies for specific communities sur as the Roma communities in Romania and in Bulgaria. In Romania, the Social Dwellings for Roma communities’ scheme has been set up. It is implemented to improve Roma’s people access to decent housing and public services. In the same way in Bulgaria, the National Programme to improve housing conditions for Roma contained measures for the construction of dwellings and social infrastructure in Roma settlements (such as health facilities, educational establishments, cultural centres, etc.).

Policies on sustainable urban development

Sustainable urban development is widely understood to include four important dimensions: environmental, social, cultural, economic. These dimensions have multiple levels – national, regional (or the level of the city) and micro-level (households, neighbourhoods etc.). Additional to these, in the European context there is the level of the union. The following section will focus on the three dimensions, reflected in Table 3, by exploring existing policies.

Table 3: Multi-scale framework for sustainable housing policies

	National	Regional	Neighbourhood
Environmental dimension	Setting the direction for sustainable construction practices, integrating housing into climate mitigation and adaptation efforts	Ensuring high quality of life in urban areas with accessible and low-carbon infrastructure, green areas and sound waste management	Ensuring resource efficiency and improving homes.
Social dimension	Recognising housing as a human right and ensuring access to decent sustainable homes for all, incl. disadvantaged groups.	Regenerating areas and providing infrastructural integration of housing to the wider areas of cities.	Empowering people and ensuring public participation and a sense of community by designing public spaces to be inclusive.
Cultural dimension	Protecting cultural heritage and promoting the link between housing and cultural economies.	Protecting city's cultural identity by preventing unnecessary gentrification, promoting urban culture and aesthetic public spaces.	Promoting affordable sporting and cultural facilities, supporting the cultural sophistication of localities.

Source: PwC, based on UN-Habitat 2011

Table 4: Policies on sustainable urban development in Europe, classified per country

Country	Energy efficiency and Renovation	Renewable energy sources	Climate adaptation	Inclusion and cultural aspects	Spatial urban planning
Austria					
Belgium					
Bulgaria					
Croatia					
Cyprus					
Czech Republic					
Denmark					
Estonia					
Finland					
France					
Germany					
Greece					
Hungary					
Ireland					
Italy					
Latvia					
Lithuania					
Luxembourg					
Malta					
Netherlands					
Poland					
Portugal					
Romania					
Slovakia					
Slovenia					
Spain					
Sweden					
United Kingdom					
Grants		Loan	Fiscal	Guarantee	
Regulatory		Non-Regulatory		Strategy	

Source: PwC based on European Construction Sector Observatory analysis

Policies on the environmental protection

Energy efficiency and renovation

As discussed in the section above (see Drivers for sustainable and affordable housing), energy efficiency could play a role in making housing more affordable in the long run, especially for low-income households. It allows for utility bills savings, adequate home climate and increased comfort. As renovation works can be expensive and households may not have sufficient means to finance them, there are various support schemes available. For some cases, there is also a trade-off between rent increases and energy renovations.

The Programme of bank guarantees in Slovakia is another policy initiative to encourage energy efficiency renovations and construction. Managed by the Slovak Guarantee and Development Bank (SZRB), the programme provides state support for renovation of the housing stock in the form of bank **guarantees on loans**, aiming to revive residential construction.

Box 6: Thermal regulations

The French Thermal Regulations (*Réglementation Thermique 2012 - RT*) came into force in 2012. The regulations aim to promote the construction of low energy buildings, the reduction of the energy use of existing buildings by 38% by 2020 (by 40% in public buildings) and the energy efficient renovation of social housing.

More precisely, the RT 2012 limits the primary energy use to an average of maximum 50kWh/m² and is expected to generate 1.68 Mtoe of energy savings by 2020. In addition, the RT 2012 has the following objectives:

- develop technological and industrial innovation in the global construction supply chain;
- improve the energy quality of buildings, regardless of the type of energy used;
- and find a technical and economical balance of technologies used for heating and hot water production.

To further strengthen the RT 2012, two new energy labels were created, namely the High Energy Performance (HPE) and the Very High Energy Performance (THPE). These correspond to two levels of energy performance exceeding the requirements of the RT 2012, and provide new principles of energy consumption in commercial buildings.

Furthermore, a savings scheme is in place in the Czech Republic to foster the renovation of the building stock. For instance, the **Building Society Saving Schemes** provides an opportunity for households to obtain affordable **loans with low interest rates** (between 3% and 6%) to invest in housing, often specifically for the reconstruction, renovation and energy-saving measures of dwellings.

Climate adaptation

Policies at the intersection between sustainability, housing and climate change involve a high level of collaboration between different levels of actors – local government, industry and society.

Box 7: The Carbon Neutral Municipalities Project

The Carbon Neutral Municipalities Project (*Kohti hiilineutraalia kuntaa – HINKU*) is part of the government's effort to make the country carbon-neutral. The project, launched in 2008, is a prime example of the collaborative work being undertaken by local governments in cooperation with a range of different stakeholders. HINKU brings municipalities, businesses, citizens and experts together to develop and pilot solutions to reduce greenhouse gas emissions. The project partners on the high level include the Ministry of Environment, Ministry of Economy and Employment, the Finnish Agency for Technology and Innovation, the Finnish Innovation Fund and the Association of Local and Regional Authorities. At the lower level, the project involves several companies and local communities. The forum provides networking opportunities, information sharing of best practices, preparation support for projects and initiatives, emission calculation services and tools, communication cooperation and company product visibility.

The involved municipalities are committed to reducing emissions faster than EU targets to meet an 80% reduction by 2030. Additionally, they must join the energy efficiency agreement between ministries and follow a HINKU-group roadmap, defining a set of activities specific to each municipality to meet its objectives. Annually, an emission reduction action plan is presented and revised. The initiative is committed to promoting the use of wood as sustainable and energy efficient construction material and fuel source (e.g. wood chips for eco-friendly heating systems), as well as investment and support for the installation of energy efficient heating and insulation solutions for buildings.

In 2008, the HINKU group involved 5 small municipalities and 36,000 inhabitants. By 2017 it has grown to 39 municipalities and 678,000 residents, which amounts to 11% of all Finnish municipalities and 12% of the population. The participating municipalities have managed to lower their emissions by 29% by 2015, comparing to 2007 levels. This displays the importance of decentralized action and tailor-made solutions on the local level, fitting the particular needs of communities. It has popularized investment in renewable energy production and fostered best practices. In the case of the Ii municipality, energy saving and reduced use of oil has resulted in savings equivalent to EUR 240,000. The key elements of its successful strategy are

- the analysis of the energy consumed in all municipally-owned buildings, replacement of oil heating systems with local and renewable sources such as biomass (wood chips) and geothermal heating;
- organisation of Energy Days with the assistance of energy experts to inform residents about energy saving methods and behaviour;
- accelerated adaptation of renewable energy solutions in the community by organizing a procurement programme to acquire solar and thermal panels.

Adopting a collaborative and holistic approach, HINKU is developing and piloting innovative and cost-effective carbon neutral solutions that are tailored to the individual needs of specific municipalities with the common goal of reducing greenhouse gas emissions¹⁷².

Renewable energy

While policies on energy efficiency are widely spread across EU MS and involve a variety of measures – fiscal stimulus, saving schemes, grants etc. – policies facilitating the use of renewable energy are less popular. Energy efficiency has a direct link to affordability, reflected in the policy design in some cases, which targets specifically lower income households. With renewable energy this is rarely the case, even though it could also generate savings from utility bills for households.

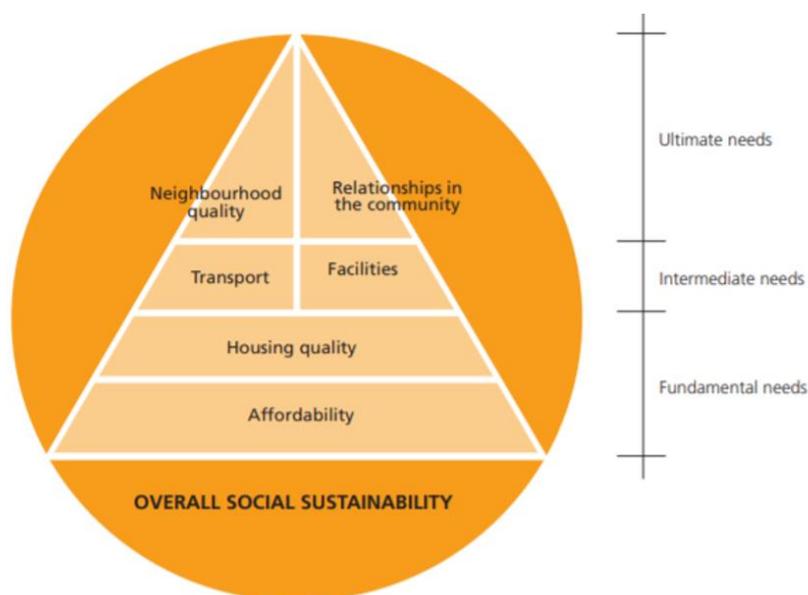
¹⁷² ECSO, PFS, <https://ec.europa.eu/docsroom/documents/28924/attachments/3/translations>

One such measure exists in Sweden, where energy efficient renovation measures are complemented by renewable energy measures. The government provides aid to support the energy efficient renovation of rental housing in socio-economically disadvantaged areas and provides grants for the energy efficient renovations for rentals. The renovation support amounts to 20% of the costs incurred for the renovation works, up to a maximum of SEK 1,000 (EUR 106) per m² and is used to provide rent discounts to the tenants. The scheme proved to be successful and from 1 November 2017, the eligibility criteria have been expanded to all rental housing in areas with socioeconomic challenges and for the installation of solar panels.

Policies on the social inclusion and facilities

The concept of social sustainability of housing tends to be often understood as and translated by the affordability and quality dimensions of housing (i.e. the fundamental needs – see figure below). In doing so, this definition and understanding ignores the intermediate and ultimate needs of citizens, which include the access and use of transport and (e.g. educational, health) facilities; but also, the neighbouring quality and relationships in the community. These dimensions are important to consider, especially when trying to better understand aspects relating to social inclusion of minority groups. Therefore, the concept of social sustainability of housing needs to be understood from a holistic perspective.

Figure 25: A conceptual representation of the social sustainability of housing



Source: UN Habitat, *Sustainable housing for sustainable cities: A policy framework for developing countries, 2012*

Policies on social inclusion

Policies focusing on social inclusion aim to bridge social divides in societies, create mixed communities and promote integration and social justice by including housing for minority groups into communal housing ecosystems. These policies target vulnerable and disadvantaged social groups (e.g. elderly people, disabled people, ethnic minorities etc.).

Policies for inclusion are designed as a part of holistic strategies and action plans. The aspects of social inclusion are often present in the wider policy perspective, in national and regional development strategies and Action Plans. This allows for a more holistic planning of urban and sub-urban areas, promoting inclusion and co-habitation of different social groups.

In the Czech Republic, the Housing Support Programme 2016-2020 supports, among other objectives, the upgrade of residential accessibility. The programme aims to improve the housing stock by removing barriers for beneficiaries with reduced mobility. The budget for 2017 amounts to CZK 45 million (EUR 1.7 million). Furthermore, it supports the construction/acquisition of social housing. This includes support for

beneficiaries of advanced age, entry-level dwellings for people with low incomes, and senior community homes. The budget for 2017 is CZK 320 million (EUR 12.4 million).

Housing policies targeting vulnerable groups of population are not widely spread in the EU. Not all EU MS put sufficient attention to the topic of social inclusion in the housing and urban development policy vision. Countries, where such a vision is underdeveloped are at higher risk of long-term social tensions, lack of integration or the isolation of certain population groups.

Most of the housing policies on social inclusion are implemented in the forms of grants. The analysis of the housing inclusion policies shows that grants remain the most efficient tool to address the needs of minorities. Grants are provided to support the vulnerable and disadvantaged population to improve the energy efficiency of the existing housing or to adapt the housing to the health or aging needs. Loans are practically not used for this purpose specifically for social inclusion purposes, but they could be applied to the vulnerable groups of population as a part of policies on energy efficiency.

Policies tackling the adaptation of housing for elderly people is the main form of social inclusion policies implemented by the MS. With the aging the population across the EU, there is a raising need to address the housing needs of elderly people. The public policies are tackling this problem by focusing on the adaptation and renovation of housing for elderly people needs. For example, Austrian government introduced specialised subsidies at regional level to target barrier-free housing for elderly or disabled population. **In Vienna**, elderly residents can apply for a grant of up to EUR 4,200, to serve for renovations, facilitating the accessibility of residential buildings. **In Belgium**, Flemish government offers a Home adaptation grant, providing financial help to over-65s to adapt their home to the physical needs of old age, by installing technical aids or carrying out renovation works to increase accessibility of housing. The grant amounts to 50% of the cost of the works and has a minimum amount of EUR 600 and a maximum of EUR 1,250.

Box 8: Housing Development Programme for Older People

Similarly, **in Finland**, Housing Development Programme for Older People for 2013–2017 provides subsidies for renovation of residential buildings, namely accessibility repairs and installation of lifts, and aims to reach a target of 1 million accessible dwellings by 2030. The programme is designed to address the changing structure of the Finish population, as the share of elderly people rises. The programme targets people above the age of 65 and enables them to continue living in their homes safely¹⁷³.

This objective refers to societal values, as it is widely accepted that older people should be supported to remain independent as long as possible and to decide on their own living situation. The programme's objectives include:

- creating the preconditions for improving the housing conditions of the older, through long-term measures by the state
- strengthening the focus on housing for older people in the planning of municipal finances and measures, and promoting the change in service structure in the direction of outpatient care
- directing the activities of the housing and construction sector to better meet the older population's housing needs and towards the improvement of housing conditions
- improving cooperation between various actors and creating operating models that support housing for older people¹⁷⁴.

The programme's target is to add 280,000 new accessible dwellings to the housing stock by 2030. In terms of existing dwellings, it plans to renovate 400,000 dwellings to make them accessible¹⁷⁵.

¹⁷³ Finish Ministry of Environment, Housing programmes and strategy, https://www.ym.fi/en-US/Housing/Programmes_and_strategies

¹⁷⁴ Finish Ministry of Environment, Housing programmes and strategy <https://www.ymparisto.fi/download/noname/%7BC18D3CB9-C16C-46EE-8208-41E59888A27D%7D/109451>

¹⁷⁵ Ibidem

This policy includes considerations about improving the sense of community in residential areas. To enable the access to community networks and events for elderly people the policy foresees accessibility renovations of meeting and service spaces and of public spaces, meant for cultural, recreational and voluntary activity.

More targeted policies on tackling energy efficiency of specific groups of population emerge in Europe. As policy makers addressing the gaps in the payment capacity of disabled population, several policy initiatives were implemented in Europe to address their needs. For instance, **in Ireland**, Warmth and Wellbeing Scheme provides extensive energy efficiency upgrades free of charge to beneficiaries in energy poverty who are living with chronic respiratory conditions. Eligible interventions include attic insulation and ventilation, cavity, dry lining or external wall insulation and boiler replacement.

Few housing policies targeting disadvantaged population and ethnic minorities are implemented in Europe. Tackling the issues of the most vulnerable populations is rarely addressed by long-term policies. Only several public policies have been identified at the EU level addressing the housing issues of ethnic minorities.

One of them is the Social Dwellings for Roma Communities (*Locuinte sociale pentru comunitatile de Rom*), launched by the Romanian National Housing Agency. It is implemented to improve Roma's people access to decent housing and public services¹⁷⁶.

More policy efforts are needed to address the issues of social inclusion in housing. The housing policies on the social inclusion of the minorities and vulnerable population remain limited in Europe. Aging population and migration trend are expected to increase the needs and pressure for the national and local governments to address the housing and affordability barriers for these people in a holistic and sustainable way. Therefore, more dialog, emphasis and efforts are needed at the EU and national level to develop a coordinated housing policy response in order to build inclusive urban environment in Europe.

Policies on social infrastructure and facilities

Sustainability of residential areas relies on good infrastructure in place (public transport, water, energy sources and public spaces) and accessibility of essential community services (schools, shops, healthcare, but also facilities for families and children).

In Romania, the National Programme for Public or Social Buildings has been active since 2001 and is still ongoing. With a budget of RON 695.75 million (EUR 155.4 million) for 2015, the Programme finances the construction of public or social buildings, such as cultural institutions, hospitals, schools, sport halls, etc.¹⁷⁷.

Policies on the holistic spatial planning

Urban transportation and transformation policies increasingly involve a holistic approach, including to spatial planning.

There are numerous support schemes on the EU and the national level. For instance, the **JESSICA Holding Fund - Joint European Support for Sustainable Investment in City Areas** is a European Commission tool developed in co-operation with the European Investment Bank (EIB) and the Council of Europe Development Bank (CEB). The initiative supports sustainable urban development and regeneration through financial engineering mechanisms. Countries like Lithuania, Slovakia have chosen to invest some of their EU structural fund allocations in revolving funds to help recycle financial resources to accelerate investment in their city's urban areas.

National policies include operational programmes for transport and smart cities initiatives among others.

¹⁷⁶ Agentia Nationala pentru Locuinte, 2018. <https://www.anl.ro/en/locuinte-prin-credit-ipotecar/>

¹⁷⁷ MDRAP, Programul National de Constructii de interes public sau social derulat prin intermediul Companiei Naționale de Investiții C.N.I. - S.A. <http://www.mdrap.ro/lucrari-publice/-7952>

Box 9: Operational Programme for Transport

The Czech Ministry of Transport launched its second Operational Programme for Transport (OPT2) in 2015. It aims at upgrading the existing road and railway infrastructure and at developing adequate and sustainable transport networks in the country. OPT2 is part of the government's effort to achieve its smart, sustainable and inclusive growth targets. The programme focuses in particular on four priority areas. These include:

- Priority 1: Infrastructure for railway and other modes of sustainable transport
- Priority 2: Road infrastructure on the Trans-European Transport (TEN-T) networks and public infrastructure for clean mobility
- Priority 3: Road infrastructure outside the TEN-T
- Priority 4: Technical Assistance

The investment in sustainable infrastructure aims to make the economy more competitive and to deliver adequate public transport services¹⁷⁸. Under the first priority, OPT2 plans to create conditions for increased use of electric traction forms of public transport in cities (e.g. metro, trams, tram-train systems, trolley buses).

The total budget of the programme is EUR 5.4 billion. Out of this amount, EUR 4.6 billion are contributed by the ERDF and the Cohesion Fund.

Transportation programmes have an impact on housing as well. The OPT2 would contribute to better air quality in cities, as well as to better connecting people living in city agglomerations to the centres of economic activity. Good transport opportunities could help spread the concentration of inhabitants, reducing urbanisation pressures.

Box 10: City of tomorrow

Austria has been very active in fostering the strategies, technologies and solutions for climate-friendly, energy efficient urban development. The Austrian R&D programme "City of tomorrow" is one of numerous initiatives supported by the Federal Ministry of Transport, Innovation and Technology that focuses on developing urban services for future-oriented cities¹⁷⁹.

Concretely, this includes the build infrastructure in connection with urban energy systems, both on the neighbourhood level and encompassing the suburban areas. New technologies should be designed to serve progressive concepts of future employment, living and mobility. An overarching aspect of the programme is that technological solutions need to be made affordable and accessible to all residents.

The programme was launched in 2013. Its objectives include the following:

- Support resilient cities and districts with high resource and energy efficiency, an increased use of renewable energy production and a high quality of life
- Optimise and adapt urban infrastructures considering ongoing urbanisation and the associated increase in resources and energy
- Develop and secure both the technological leadership and the international competitiveness of Austrian companies and research institutions¹⁸⁰.

So far, there have been four annual calls for projects within the programme. As it relies on inputs by various stakeholders, the policy offers a participatory approach to exploring urban services.

¹⁷⁸ ECSO, PFS, <https://ec.europa.eu/docsroom/documents/30287/attachments/3/translations/>

¹⁷⁹ Austrian Information, Smart Urban Development, <http://www.austrianinformation.org/summerfall-2014/smart-urban-development>

¹⁸⁰ Stadt der Zukunft, <https://nachhaltigwirtschaften.at/en/sdz/>

Key takeaways:

- Policies touching upon environmental protection – energy efficiency and renewable energy and climate adaptation are fairly mature, and through the implementation of financial instruments such as loans and guarantees often involve the private sector and development finance institutions;
- The role of the public sector is generally stronger when it comes to social inclusion related policies – whereby instruments such as grants are used to support vulnerable groups, and contribute to the development of inclusive communities;
- Policies on holistic urban planning show that cities can serve as a strategic entry point where several policy areas can converge. These are hence expected to play an increasing role in the implementation of holistic type of approach to sustainable urban planning;
- The EU, through the Housing Partnership, can also play a key role in better linking cities and countries together, serving as knowledge and experience-sharing facilitator. However, according to Build Europe, to ensure a balanced and inclusive perspective, private stakeholders need to be included in this process, among other stakeholders.

6.

Lessons learnt

Embracing (and dealing with) the complexity around housing affordability

As demonstrated in this analysis, affordable housing is a complex issue. It is affected by a plurality of factors and actors, which directly or indirectly shape and influence the housing market –at the European, national and local levels. However, housing affordability is too often approached as a symptom of a housing market failure – ignoring other dimensions (such as transport, energy, sustainable urban planning etc.), which are intrinsically linked to housing affordability. In some cases, the territorial dynamics (cities, town and suburbs and rural areas) are not often explicitly considered in national policies, which approach the housing market solely from a national/uniform perspective. This study shows clearly that to put in place effective policies, policy-makers will need to i) embrace and deal with the underlying horizontal (cross-sectoral) and vertical (across geographical levels) complexity of the housing affordability issue; and ii) avoid simplifying the issue.

Approaching housing affordability from a long-term perspective, and aiming for continual (and incremental) changes.

Because of its underlying complexity, housing affordability is an issue that cannot be fully tackled in the short term. Policy-makers should therefore approach housing affordability from a long-term perspective, and aim for (continual) gradual changes. One way to do this is by promoting the role of cities in housing affordability. This way, some gains can be secured on the short-term, which will serve as platforms for cumulative gains over the longer-run. By focusing on specific issues (smaller problems) and tailoring policies to the local context, policy-makers will be better able to define and target the beneficiaries of public support. This, on the longer-term, may help in shifting the incentives of some of the key stakeholders – thus allowing for more ambitious reforms in terms of housing supply. Policy-makers should hence design and implement action plan on housing affordability, detailing some of the inputs and activities that need to be undertaken to reach sustainable outcome and impact on housing affordability.

In doing so, policy-makers need to be flexible in terms of the approach, actors, instruments and tools they use, to reflect possible changes in the broader housing affordability environment. Such an approach would also require solid and systematic monitoring and evaluation processes linked to policy implementation, and stronger focus on gathering relevant data (to ensure the effectiveness and relevance of the same policies).

Collaborating and coordinating in a multi-level perspective

There is no “one fits all” type of recipe towards solving the housing affordability equation. As showed in this study, the issue of housing affordability is very much linked and integrated within a specific socioeconomic, territorial and political landscape. Therefore, combining adequately supra-national, national and territorial level interventions and responsibilities is key to building synergies between policy instruments and tools with territorial/local institutional, social, political and economic knowledge.

A multi-level approach can include European networks of best practices, European funding (such as in the case of ERDF and energy efficiency renovations), national housing policies, city level inputs and participation from the relevant stakeholders.

The example of the City of Vienna can be quite telling: there the municipality government – the city of Vienna - is in the driver seat position, as it has an in-depth knowledge of the local actors, resources, opportunities and the broader socio economic and territorial dynamics. It developed an advanced model of sustainable and affordable housing as integral part of its urban planning, supported as well by the Austrian

government (i.e. the housing subsidies, funded by income taxes). However, there are also evidences that such a scheme can be restrictive for participants outside Vienna as well as quite costly for the community. This can be seen as indication that in some specific cases (not transferrable to all countries), cities can and should take the lead – and therefore that their role should not be overlooked. Naturally, it may not be the case in other country context and strong attention should be placed on the incentives and constraints driving each actor at different levels.

Policy-makers and actors aiming to foster housing affordability need to think and work in policy dimension – housing affordability is not only a technical issue

As illustrated in this report, the design and implementation of housing (affordability) policies are often the arena of diverging and sometimes conflicting interests – e.g. those of home owners and those of tenants; policy-makers and promoters. In other words, any policies and instruments tackling the issue of housing affordability will favour the interests of specific actors at the expense of others. In some instances, policies favouring home ownership drove prices up and not affordability, in some cases making it harder for young people access home ownership. *A contrario*, policies such as rent control and in some cases, those supporting the social housing sector as in the case of the Netherlands¹⁸¹ may have negative effect on house prices.

To design policies that will be effective and feasible, policy-makers need to take account of these political economy dynamics; identify whenever possible areas where interests converge; and strike the most relevant trade-offs according to the policy objectives.

Investing in housing affordability, using smart and effective financing instruments

Several options are exploited by governments when it comes to financing housing affordability and sustainability, including traditional monetary and fiscal measures but also more innovative financing instruments. In the case of the latter, the report highlighted several types of financial instruments put in place by national, regional and local governments, including some particularly cutting-edge instruments. These notably include the Housing Fund launched by the city of Vienna, the Social Impact Bonds in countries such as the Netherlands, Belgium, Germany, Austria, and Portugal, but also supported by European funds (i.e. EFSI). What is particularly interesting with these instruments is their efficiency in leveraging public finance, their ability to be tailored to socio-economic context which they target, their capacity to incentivise private sector investments, and their complementarity with other more “rigid” instruments such as monetary and fiscal measures. In other words, these instruments incentivise public-private sector cooperation and collaborations, instead of having them work in silos.

Here we would argue that a coordinated intervention at European level – combining existing (and perhaps new and more specific and innovative) financing and technical assistance instruments tackling housing affordability, should be put in place to complete and build on national initiatives. In particular, initiatives targeting particularly the issue of the rental market could be most relevant and provide a positive socio-economic impact, and in particular a better life to European citizens.

Finding the right regulatory mix when it comes to boosting land supply

Land use and planning is one of the key issues around housing affordability. First, national and local governments could build up reserves of land under public ownership to be provided for affordable housing construction at a preferential price. At the same time, it should be noted that there are concerns about the effectiveness and financial sustainability of public land banks for public housing¹⁸². Second, they could facilitate the transformation of unused public facilities into residential areas. Third, the zoning and planning obligations are often quoted as key elements that can be used to oblige developers to include a quota of affordable housing units in the context of new real estate projects. Fourth, governments can also maximise

¹⁸¹ See more information at: <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-netherlands-en.pdf>

¹⁸² See more information at <https://www.itinerainstitute.org/en/book/housing-times-scarcity-towards-renovated-housing-policy/>

the use of land by identifying and encouraging – e.g. through tax, home owners of vacant land and properties to sell or rent their properties. These recommendations and their implementation should be tailored to the local economic and social context, in a way that best fit the interests of the stakeholders on the ground.

Boosting land supply and housing supply is a challenging exercise, as it is not dictated only by economic or technical aspects. Political and institutional dynamics matter. Therefore, understanding the sometimes-diverging interests of national and local governments, and identifying potential areas of traction for reforms are of utmost importance.

Social, environmental and economic sustainability are part of the solution around housing affordability

As highlighted in this report, the issue of housing affordability is intrinsically linked to other cross-sectoral dimensions, including transport and energy infrastructures, social and community development etc. Housing affordability should hence be seen in the broader sustainability framework, and will be only solved in such a context. As a result, policy-makers need to put more efforts in coordinating policies – whether at the European, national and local levels. In this regard, the progressive integration of technologies in the various sectors may help building such connections, and ensuring that synergies to foster sustainable economic, social and environmental development.

However, while costs linked to higher sustainability impacts can often be calculated (e.g. energy efficiency renovation), the longer-term outcomes and impacts are often hard to capture. Policy-makers should hence put more efforts in building the business case and providing financing support for pilot projects around sustainability and housing affordability.

