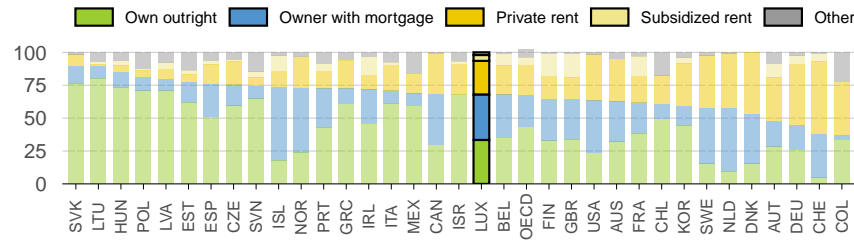


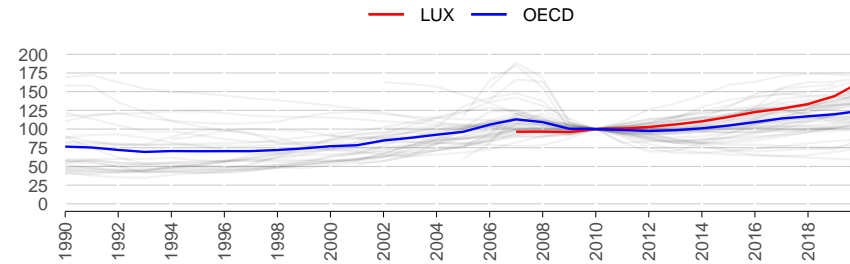
# LUXEMBOURG

Housing policies affect well-being through a wide range of channels including access to decent shelter, environmental quality, efficient use of scarce resources, type and extent of commuting, as well as its contribution to strong and resilient economic growth. This snapshot provides a cross-country perspective on Luxembourg's housing-related indicators and policy settings. Households' tenure choices depend on demographics and/or socio-economic factors, as well as policies related to public promotion of housing, housing taxation and rental regulations. There are large differences in tenure structure across OECD and key partner countries: homeownership in Luxembourg is close to the OECD average (Figure a). Real house prices have risen strongly in many countries since the 1990s, including Luxembourg. In Luxembourg, real house prices have grown at a fast rate in the 2007-2019 period (Figure b). Luxembourg's housing investment rate has seen an increasing trend from the early 2000s with a peak in 2008 followed by a short decline in the years of the Global Financial Crisis (Figure c). Finally, mortgage markets play a crucial role in household finances since housing generally constitutes household's single largest financial asset. The ratio of outstanding household mortgage claims to GDP in Luxembourg is relatively high, reflecting limited affordability of dwellings (Figure d).

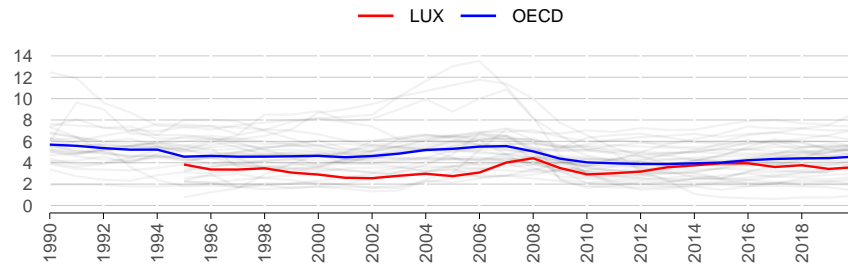
(a) Housing tenure distribution (percentage)



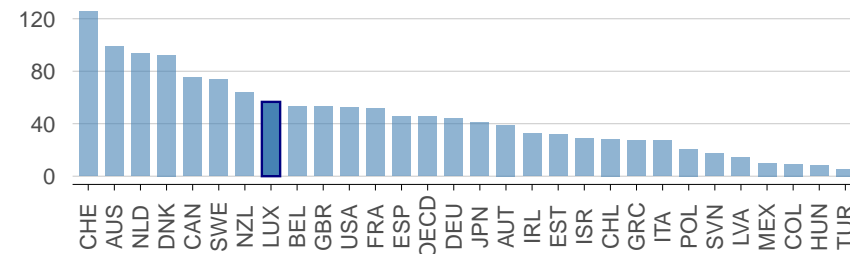
(b) Real house price index (2010=100)



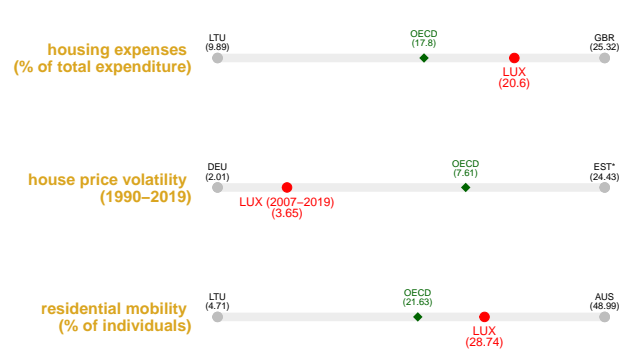
(c) Housing investment as share of GDP (percentage)



(d) Housing finance: mortgage claims as a share of GDP (percentage)



## Efficiency



\*House price volatility in Estonia refers to the 2005-2019 time period.

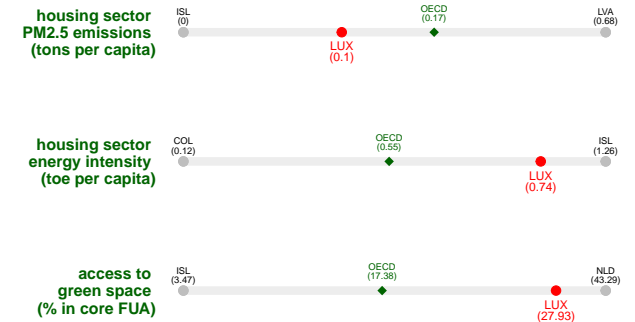
Efficiency measures the economy’s capacity to align housing supply with demand, thereby limiting excessive price and rent increases, contributing to macroeconomic stability and facilitating residential mobility. In Luxembourg, housing costs, comprising actual and imputed rents as well as maintenance and repair of dwellings, make up a high share of overall household expenditure compared with the OECD average, reflecting high mortgage principal and interest payments for homebuyers. Conversely, house price volatility is among the lowest in Luxembourg, in part explainable with the recent almost monotonic upward dynamics in house prices. With regards to residential mobility, as measured by the percentage of individuals who changed residence in the years 2008-2012, Luxembourg ranks relatively high by international comparison. This is partially due to the large share of foreign expatriates working in Luxembourg on a temporary basis.

## Inclusiveness



Inclusiveness refers to the housing sector’s capacity to deliver adequate and affordable homes across the income distribution while limiting residential segregation. Over the last decade in Luxembourg, housing affordability has been deteriorating significantly, stoked by population growth, a high rate of household formation and limited use of land available for construction. The country is now located close to OECD average in terms of housing cost overburden (for low income tenants), measured by percentage of low-income tenants spending more than 40 percent of income in rent, although with fast worsening dynamics. A relatively low overcrowding rate is the result of an existing housing stock characterised by a high number of rooms per member of household, in particular in the sector of owner-occupied housing, and in general of the increasing surface area of single-family houses. Lastly, average commuting time is higher than the OECD average, which suggests that relatively few people can afford to live close enough to their workplace.

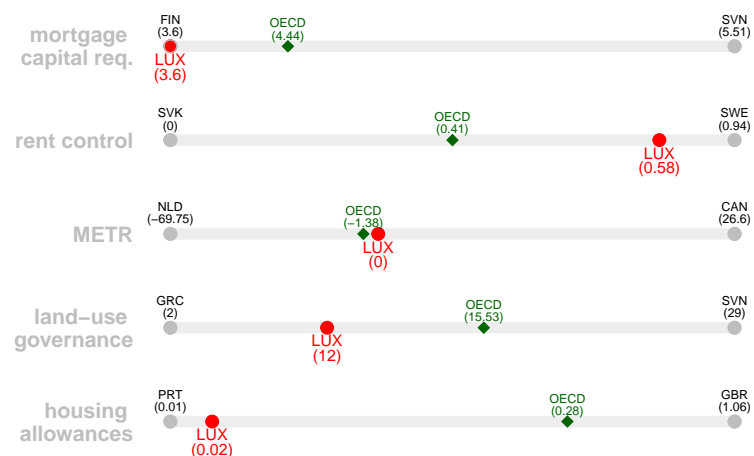
## Sustainability



Sustainability assesses the housing sector’s readiness for the transition to a low-carbon economy and its capacity to attenuate pressures on the ecosystem by preserving biodiversity and residents’ health. Residential activities are responsible of 44 percent fine particulate matter (PM2.5) emissions on average across OECD countries, which is the air pollutant that poses the greatest risk to health globally. Luxembourg displays relatively low housing-related PM2.5 emissions. Conversely, it is among the countries with the highest level of housing-related energy intensity. With respect to the average access to green space in urban areas, which is linked to a variety of health and well-being benefits, Luxembourg is among the highest by international comparison, as a consequence of the limited population density in urban areas.

## Policy Profile

Housing policies shape the efficiency, inclusiveness and sustainability of the housing sector. The chart below shows the principal indicators capturing the policy profile for Luxembourg.



Requiring lenders to use more capital when funding risky mortgage loans has been found to result in lower crisis risk and stronger recoveries. More stringent rent control, which reduces the profitability of housing investment, is empirically associated with a weaker response of housing supply to change in demand. Higher marginal effective tax rates (METR) on housing property help containing house price dynamics, thereby contributing to housing affordability over the long run. Higher values of the land-use governance indicators reflect more decentralisation to the municipalities and/or more overlap across government levels; they have been empirically linked to housing supply that is less responsive to changes in demand. More spending on housing allowances typically facilitates residential mobility in some countries, which is often a condition for labour mobility. Higher rent subsidies can however inflate rents and prices where supply fails to respond flexibly to demand.

## Definitions\*

Structural indicators	
Housing tenure	Arrangement under which the household occupies all or part of a housing unit. 2018 or latest year available. Source: OECD Affordable Housing database and Adva Center (2017); Gran Encuesta Integrada de Hogares (DANE, 2020) for Colombia; *Public Housing Option: Adva Center's Response to the Housing Crisis in Israel* for Israel. Notice that tenants renting at subsidized rent are lumped together with tenants renting at private rent in Australia, Canada, Chile, Denmark, Mexico, the Netherlands and the United States, and are not capturing the full extent of coverage in Sweden due to data limitations. For Colombia, data on subsidized rents are missing, and the category "Other" includes usufruct, de facto occupancy and collective property. In the case of Israel over outright and owner with mortgage are displayed together.
Real house price index	Real house (hedonic) prices evolution (100=2010). Source: OECD House Price Analytical Database
Housing finance	Loans for house purchasing, in percent of GDP (in %). 2020 or latest year available. Source: OECD Resilience database, National Bank of Belgium, Central Bank of Chile, DANE for Colombia, Central Bank of Ireland
Housing investment	Housing investment as share of GDP (%) (1990-2019). Source: OECD National accounts data, and Cuenta Nacionales Anuales (DANE) for Colombia
Efficiency	
Housing expenses (% of total expenditure)	Housing consumption as a share of total household expenditure (in %). The indicator includes expenditure for actual and imputed rents, maintenance and repair of the dwelling. 2019 or latest year available. Source: OECD National accounts data
House price volatility (1990-2019)	Standard deviation of (de-trended) real house prices (1990-2019). Source: OECD calculations based on OECD Analytical House Price Database
Residential mobility (% of individuals)	Share of individuals that changed residence in 5 years (in %), 2012. Source: OECD Calculations based on 2012 EU SILC Data for EU countries, AHS 2013 for the United States, HILDA 2012 for Australia, Encuesta de Calidad de Vida Urbana (ECVU) 2018 for Chile, Censo Nacional de Población y Vivienda 2018 for Colombia
Inclusiveness	
Overcrowding rate	Share of household that does not have at its disposal a minimum number of rooms relative to their household size and composition (in %). 2018 or latest year available. The minimum number of rooms is equal to: one room for the household; one room per adult couple in the household; one room for each single person aged 18 and over; one room per pair of single persons of the same sex 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. Source: OECD Affordable Housing database. Data for Colombia comes from Censo Nacional de Población y Vivienda 2018 - Metodología Deficit Habitacional 2020
Housing cost overburden (for low income tenants)	Share of tenants in the bottom quintile of the income distribution spending more than 40 percent of disposable income on private rent (in %). 2018 or latest year available. Source: OECD Affordable Housing Database and Gran Encuesta Integrada de Hogares, DANE (2019) for Colombia
Commuting time (in minutes per day)	Average time spent travelling to and from work or study for all 15-to-64-year-olds (in minutes per day). Latest available year, ranging from 1999 (Portugal) to 2019 (USA). Source: OECD Family Database; Casen 2017 for Chile and DANE (Encuesta Nacional de Calidad de Vida) 2019 for Colombia
Sustainability	
Housing sector pm2.5 emissions (tons per capita)	Estimates of the annual volume of emissions of PM2.5 with respect to man-made emissions from non-industrial combustion sources, in tons per capita. 2018 or latest available year. Source: OECD Environment database, 2019
Housing sector energy intensity (toe per capita)	Residential energy consumption (in tonnes of oil equivalent per capita). 2019. Source: CO2 emissions from fuel combustion database, IEA (2020) and World energy balance, IEA (2020)
Access to green space (% in core fua)	Share of green space area in core functional urban areas (in %). 2020. (The indicator is computed at FUA level and aggregated using the weighted average by FUA population in 2015). Source: OpenStreetMap and OECD calculations
Policy indicators	
Mortgage capital req.	Minimum regulatory Tier 1 ratio multiplied by unweighted average of risk weights for mortgage loans with an LTV ranging from 50 to 130. 2018 or latest year available. Source: ECB's Macroprudential Policies Evaluation Database (MaPPED) complemented by OECD own research
Rent control	Indicator reflecting on the number of regulations that restrict rent levels and rent increases. The indicator ranges between 0 and 1, with a higher number indicating greater stringency. 2019. Source: OECD calculations based on OECD Questionnaire on Affordable and Social Housing (QuASH)
METR	The indicator combines information on property taxes and housing-related provisions of income taxes. It is computed as the difference between the pre and post-tax rates of return of a marginal investment divided by the pre-tax rate of return of that investment where post-tax real rate is the minimum rate of return necessary to make the investment worthwhile (in %). 2016. Source: Preliminary illustrative estimates pending the publication of the final estimates of the forthcoming OECD Tax Policy Studies
Land-use governance	Indicator of restrictiveness of the land use regulation. It comprises two components: decentralisation and overlap of government levels in land planning decisions. The indicator ranges between 2 and 30 with a higher number indicating greater stringency. 2019. Source: OECD calculations based on OECD Questionnaire on Affordable and Social Housing (QuASH, 2019)
Housing allowances	Public spending on means- and/or income-tested housing allowances and transfers to households (in % of GDP). 2018 or latest year available. Source: OECD Affordable Housing database

\*The choice of indicators may vary by country depending on data availability.