

# New Housing Policy Challenges in the Era of Decarbonisation and Digitisation

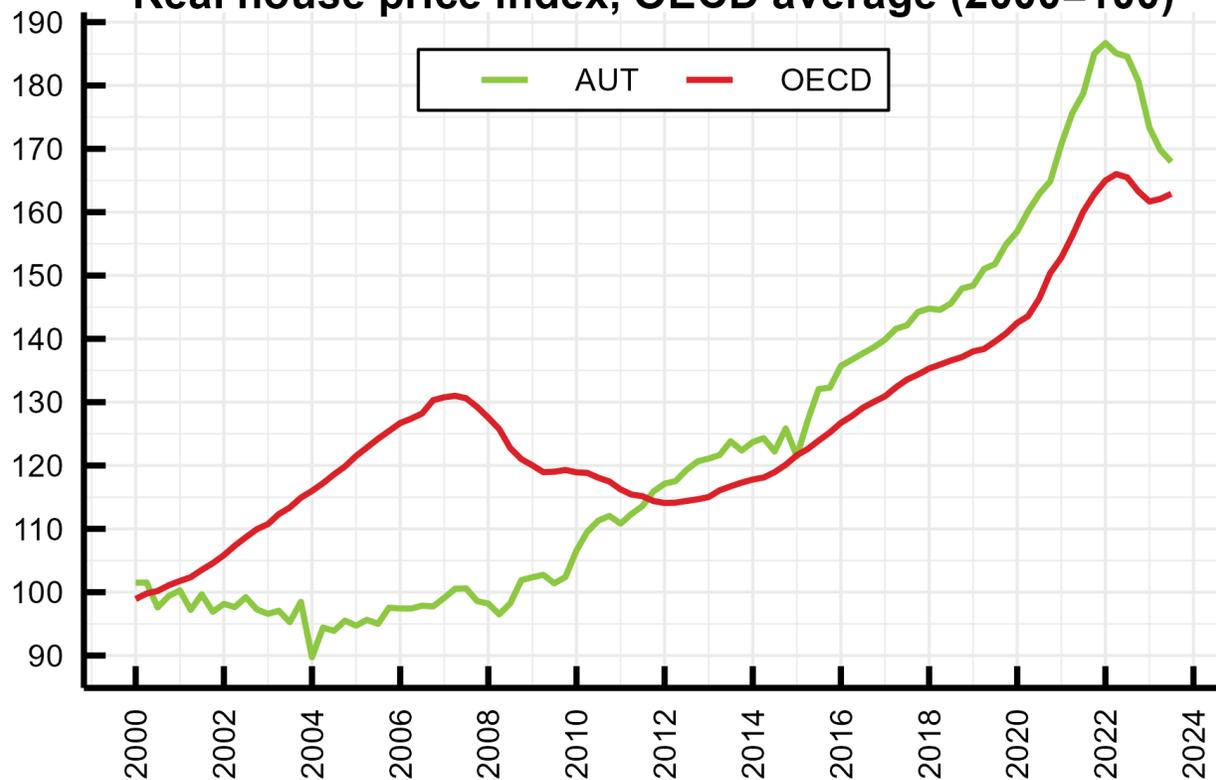
*Insights from the new OECD  
report Brick by Brick II*

**Boris Cournède & Volker Ziemann**  
*SUERF, 13 March 2024*

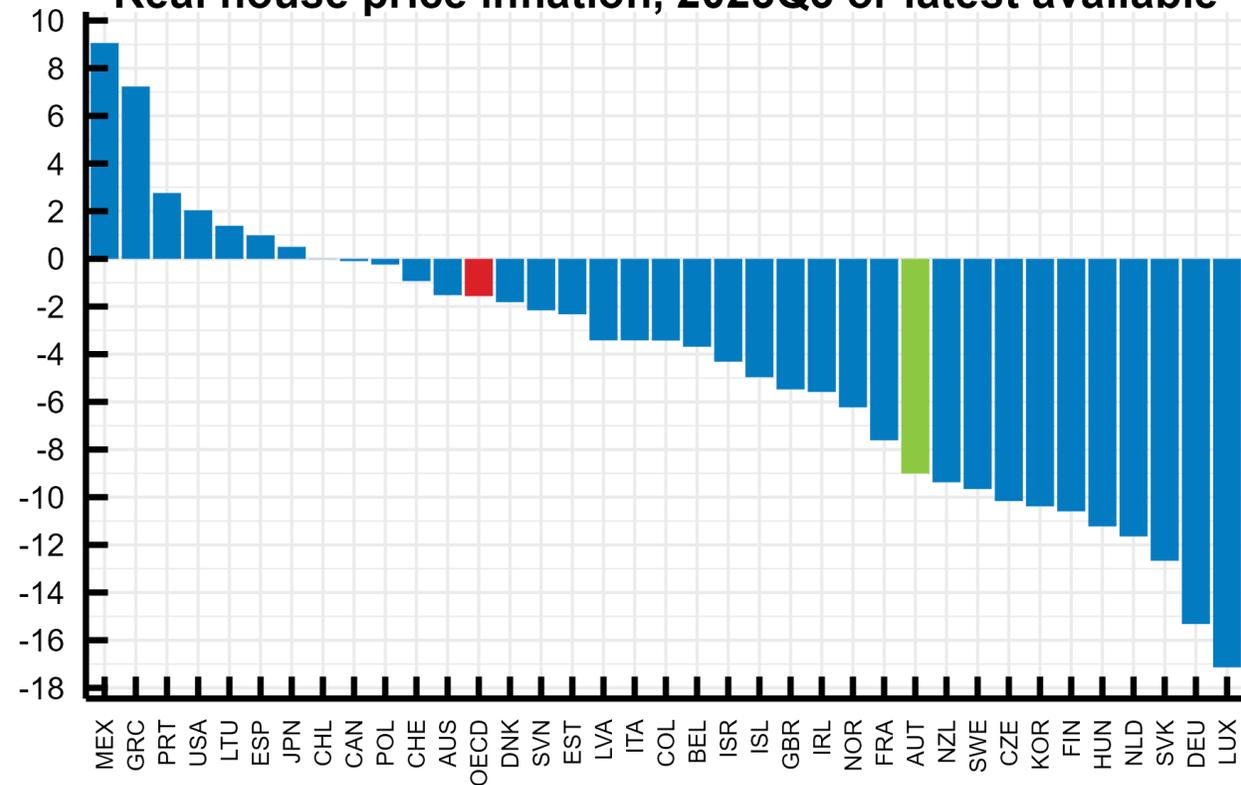


# House prices fall in many countries, albeit after a long and steep surge

Real house price index, OECD average (2000=100)



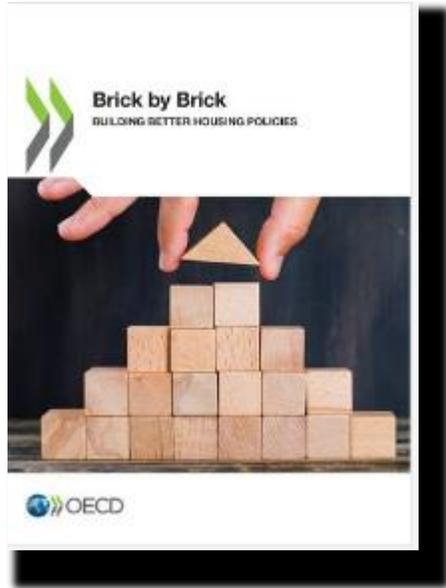
Real house price inflation, 2023Q3 or latest available



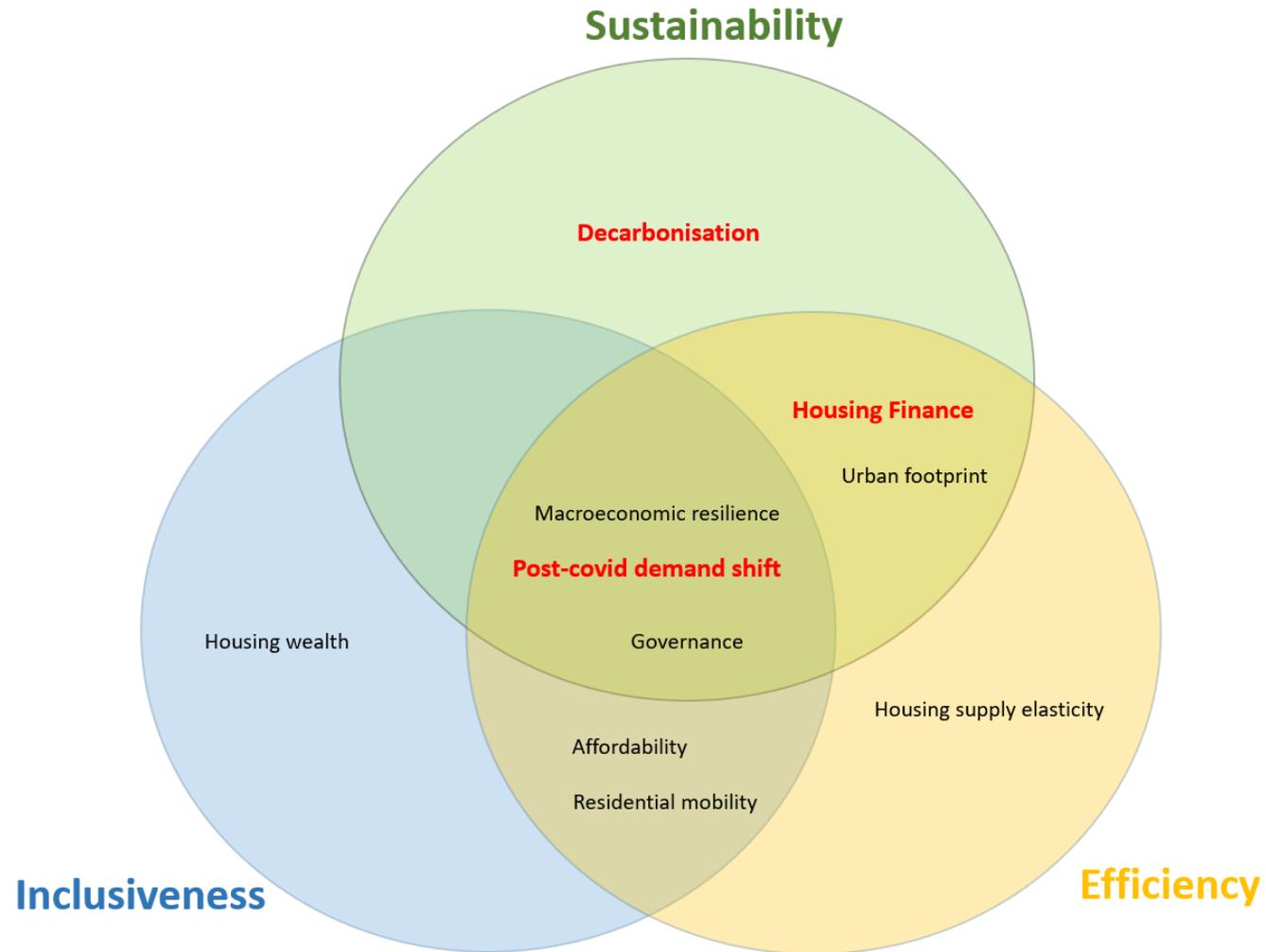
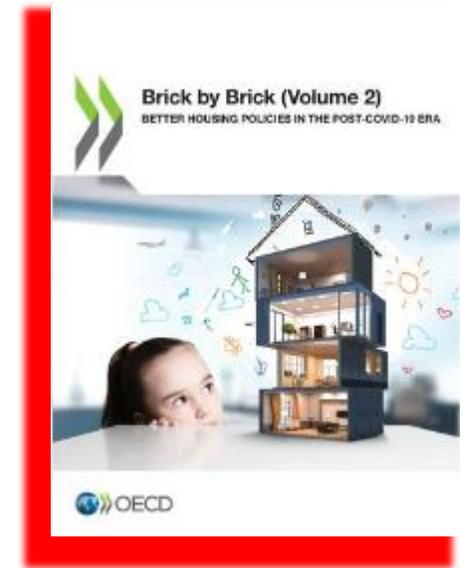
Source: OECD Analytical House Price Indices.



## Brick by Brick (OECD, 2021)



## Brick by Brick – Vol.2 (OECD, 2023)

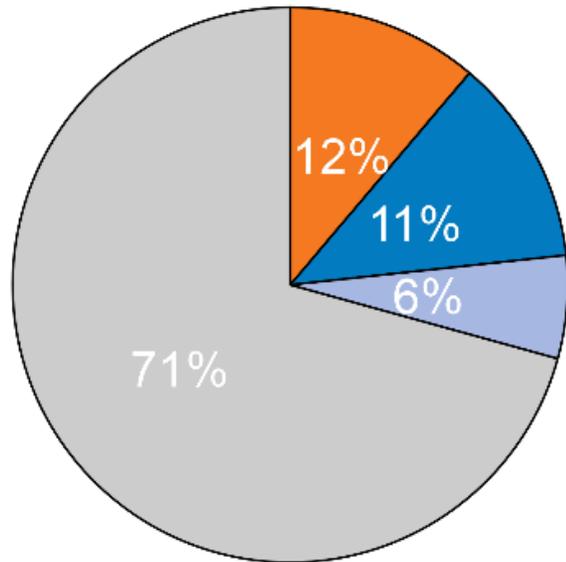


# Decarbonisation

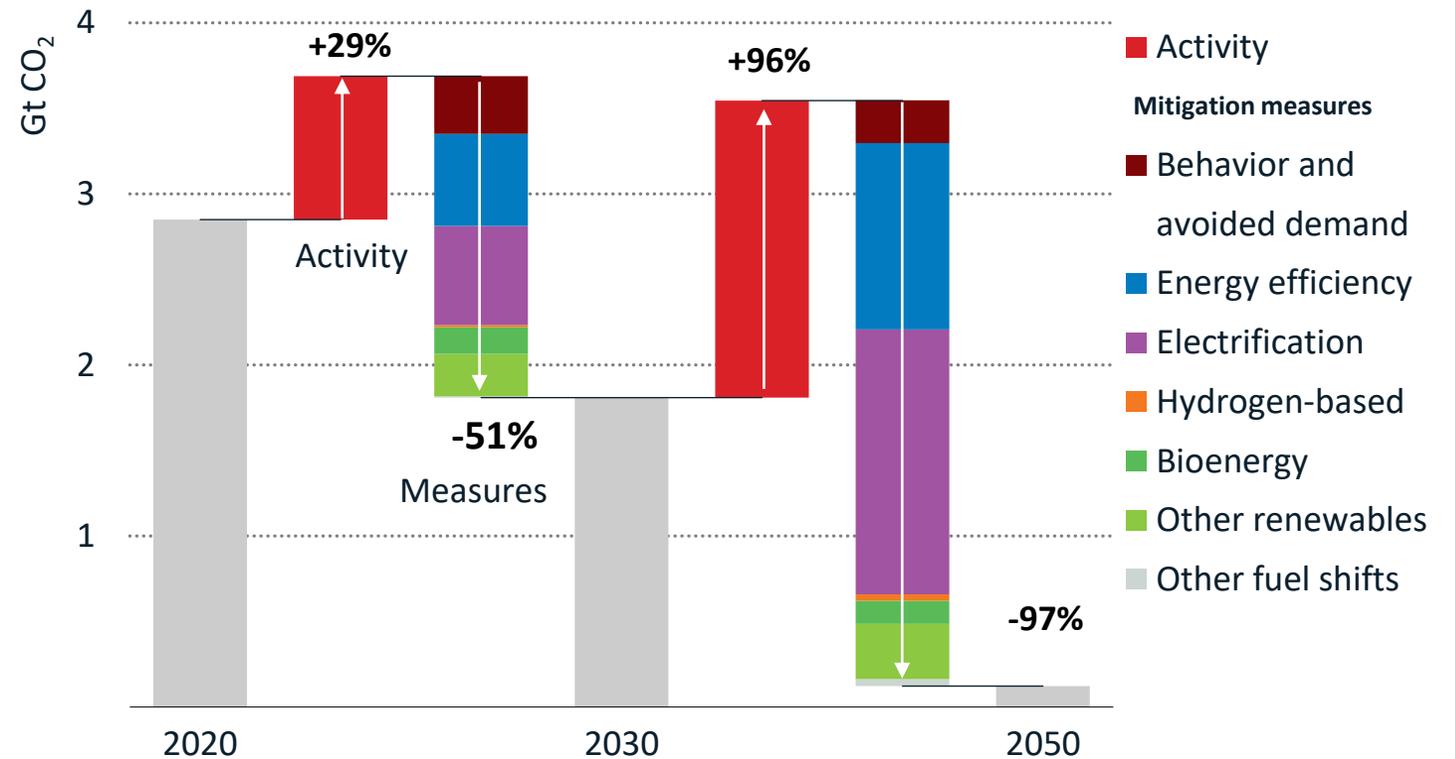


# Decarbonisation of the building sector requires strong action

OECD CO2 emissions by sector

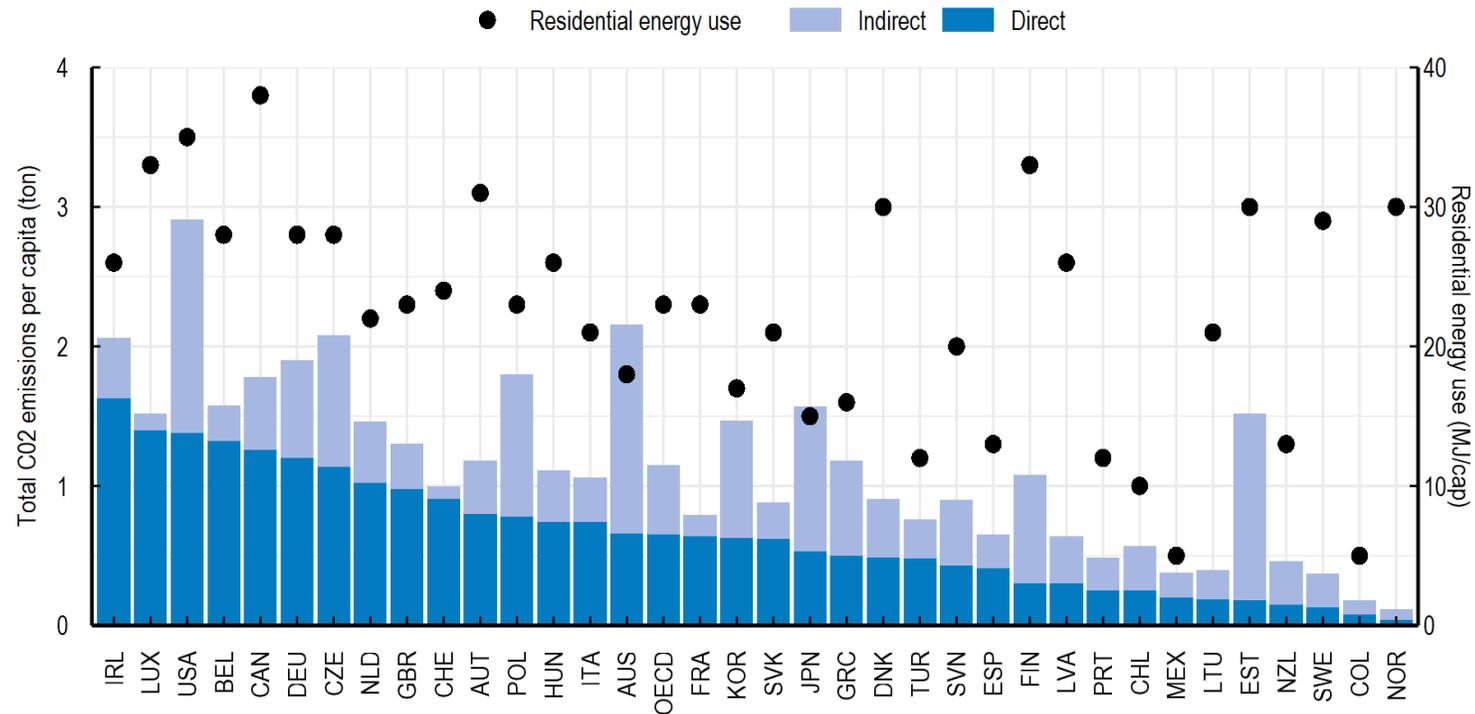


Breakdown of **global** direct CO2 emission reductions in the buildings sector, by measure, IEA Net Zero scenario.



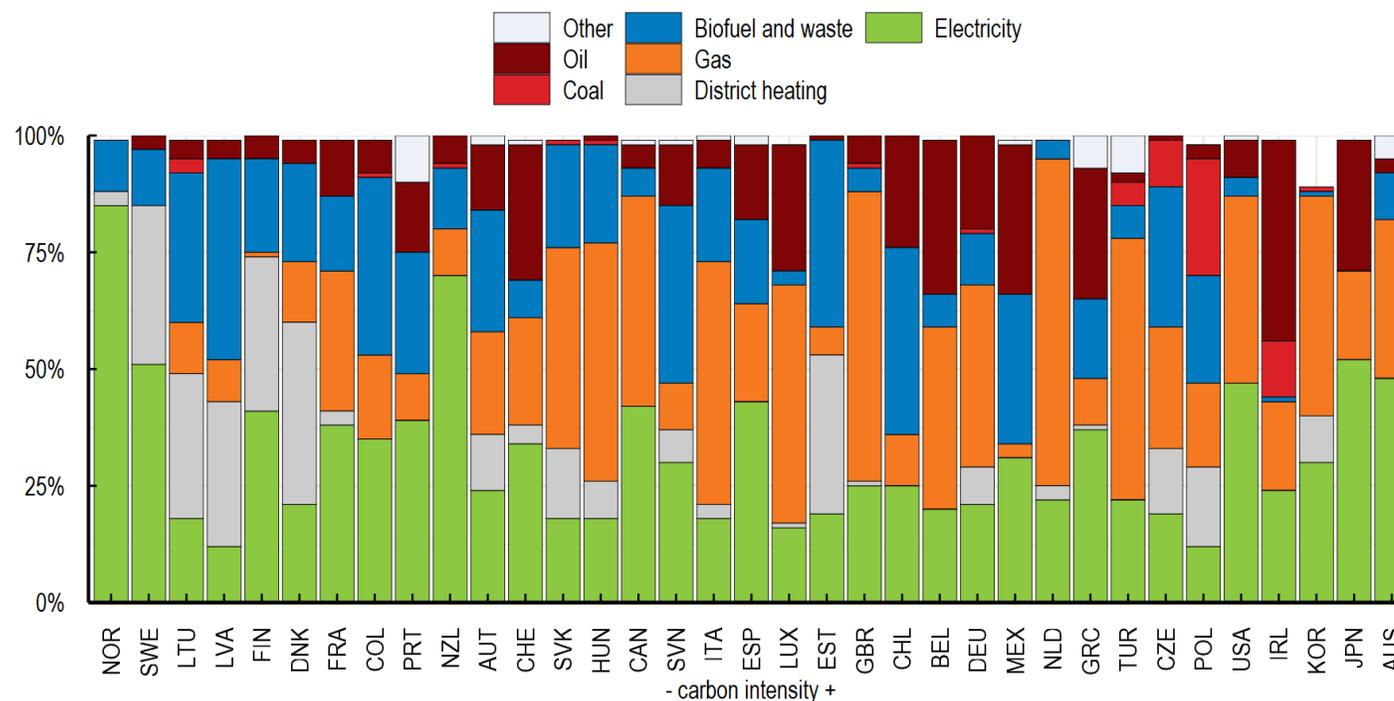
# Decarbonisation can be achieved in the face of strong energy needs

Residential CO2 emissions (bars) and energy use (dots)



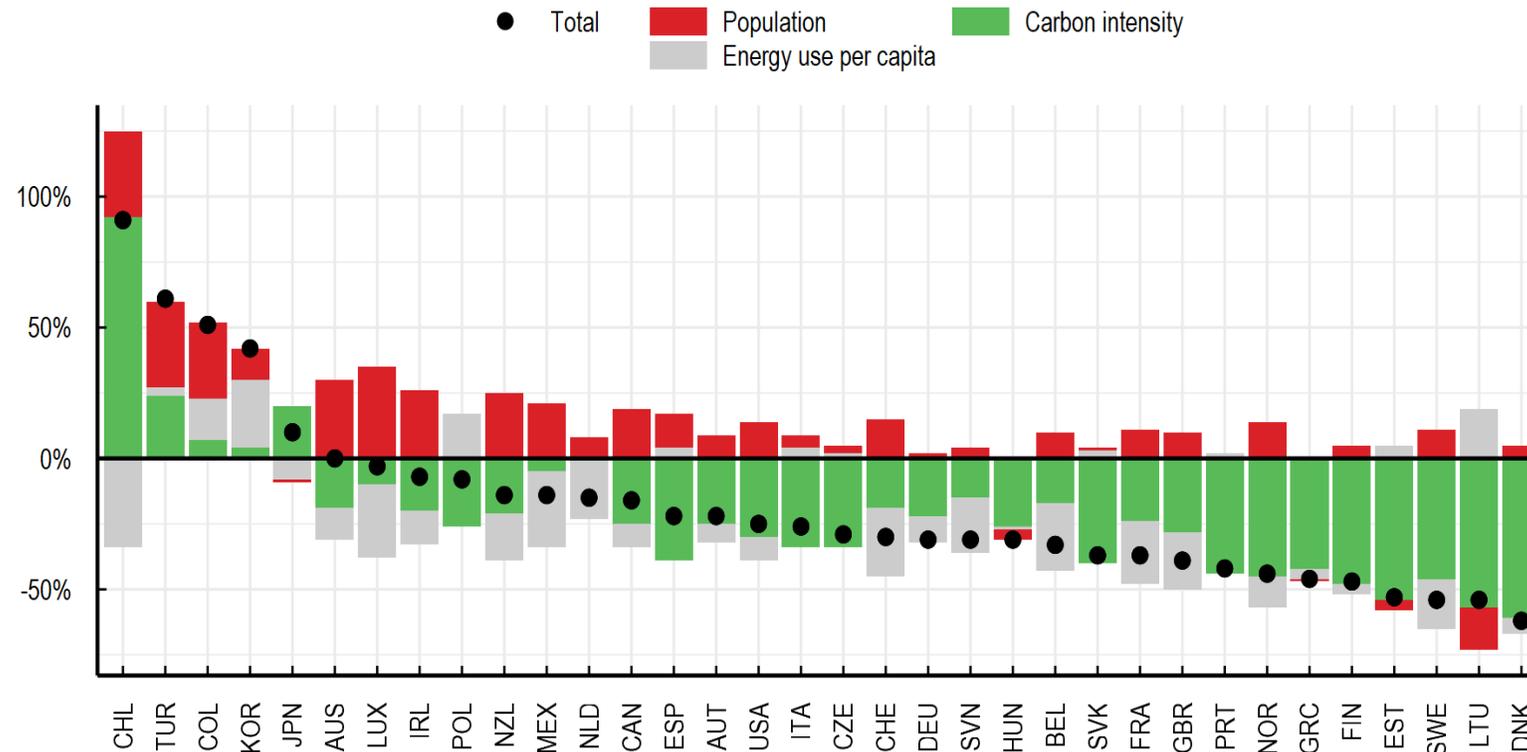
# Carbon intensity depends on direct and electricity-generation emissions

Breakdown of residential energy consumption, 2020 or latest available data



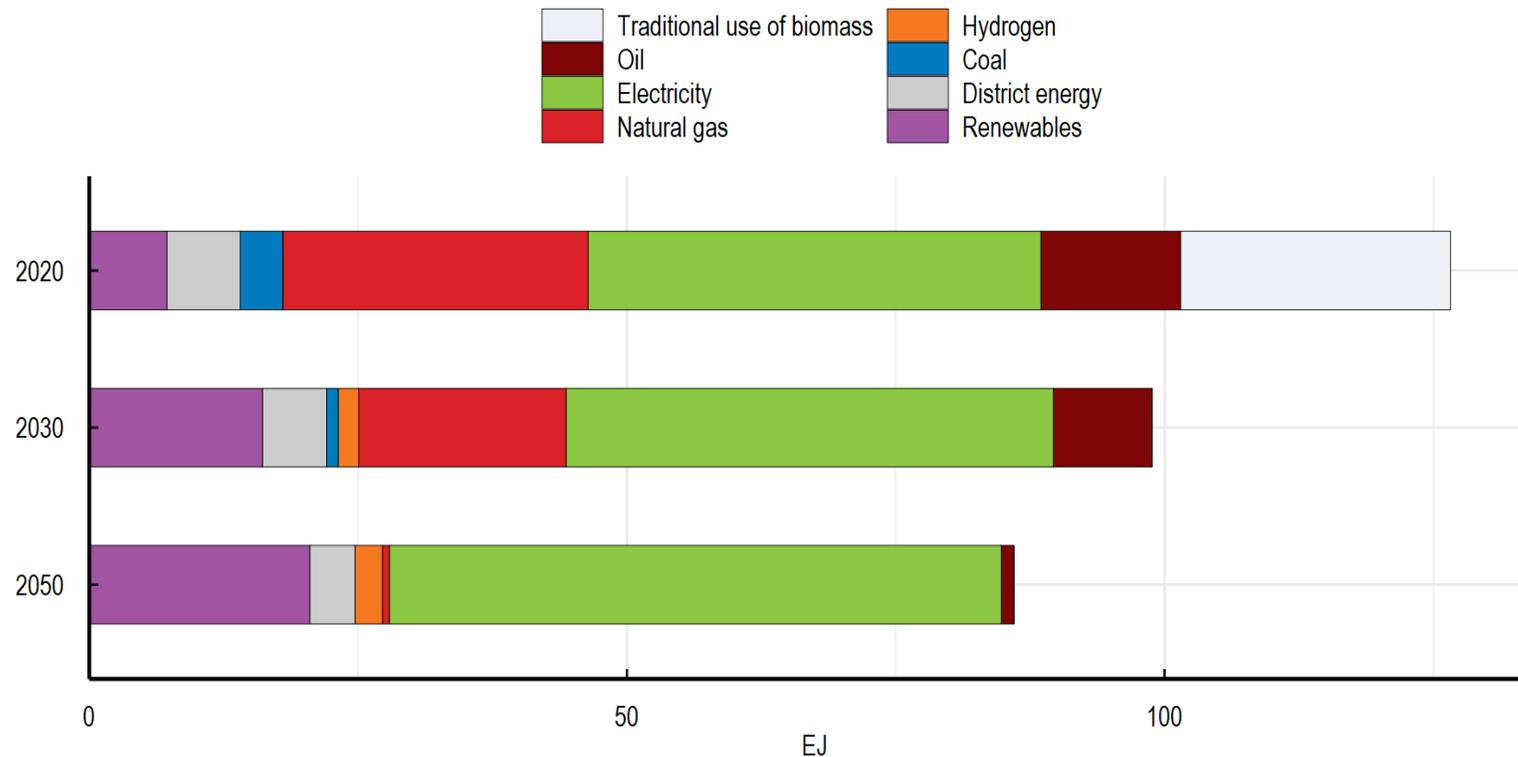
# Carbon intensity has been the main driver of reductions in housing emissions

Breakdown of total 2000-2020 changes in residential CO2 emissions



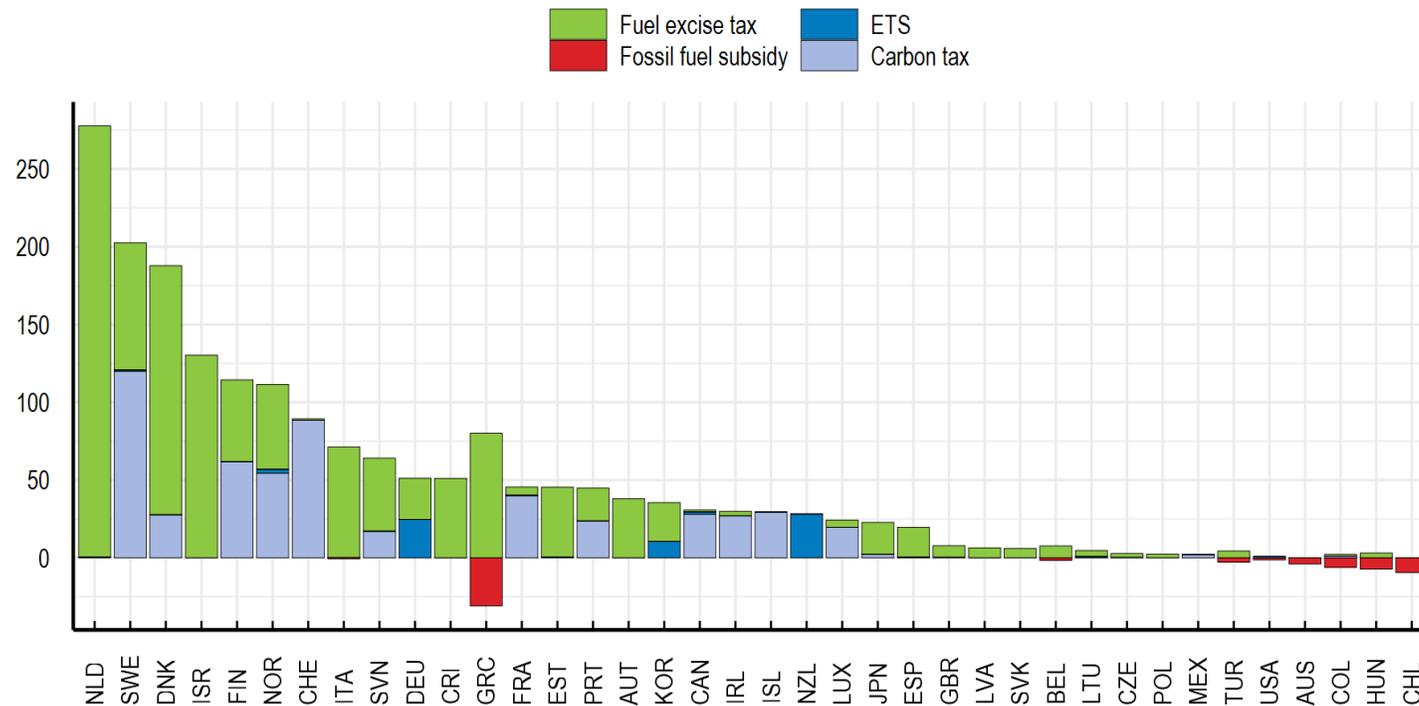
# Electrification will keep being a key driver of housing decarbonisation

Global final energy consumption by fuel



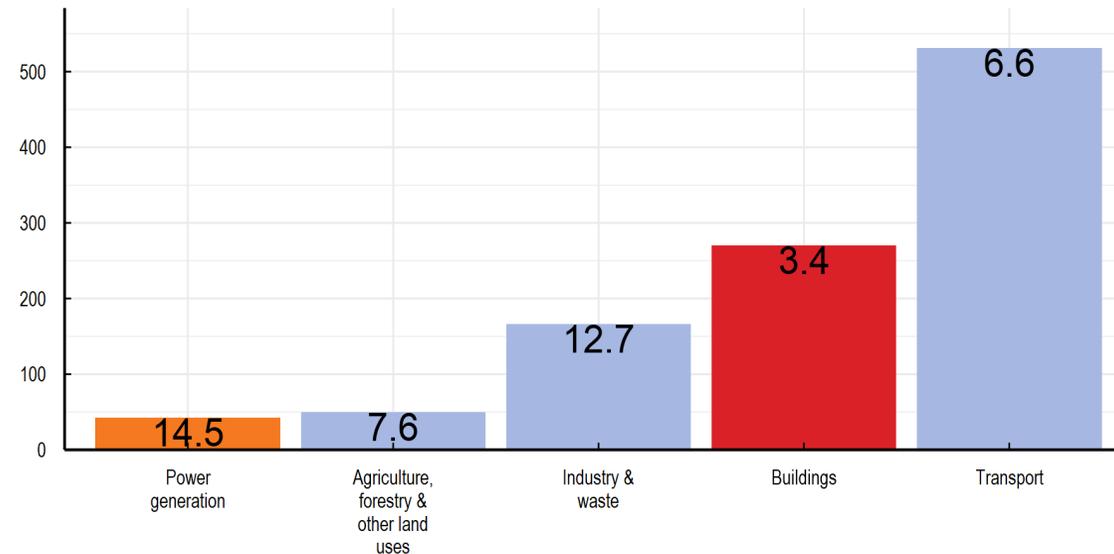
# OECD countries apply extremely contrasted effective carbon rates to housing

Effective carbon rates for residential CO2 emissions, 2020 or latest available



# Abatement costs are high for buildings

Marginal abatement costs in USD per ton of CO2 (bars) and quantitative potential in Gt of CO2 (numbers)



# Reducing CO2 emissions from residential buildings requires a mix of measures

	CO <sub>2</sub> pricing	CO <sub>2</sub> regulation	Subsidies	Rental laws	Financial Policy
Examples	<ul style="list-style-type: none"> <li>▪ CO<sub>2</sub> tax</li> <li>▪ ETS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Boiler bans</li> <li>▪ Energy labeling requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insulation</li> <li>▪ Heat pumps</li> <li>▪ R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rent adjustments</li> <li>▪ Renovation decisions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Transparency and comparability in green building labeling</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>✓ Clear incentives</li> </ul>	<ul style="list-style-type: none"> <li>✓ Direct effects</li> </ul>	<ul style="list-style-type: none"> <li>✓ Strong support</li> <li>✓ Indispensable for basic R&amp;D</li> </ul>	<ul style="list-style-type: none"> <li>✓ Overcoming split incentives</li> <li>✓ Avoid stalling</li> </ul>	<ul style="list-style-type: none"> <li>✓ Expansion of green real estate financing</li> <li>✓ Enabling the recognition of green loans</li> </ul>
Restrictions	<ul style="list-style-type: none"> <li>❖ Insufficient due to market failures</li> <li>❖ Distribution effects in the first round</li> </ul>	<ul style="list-style-type: none"> <li>❖ Economic costs</li> <li>❖ Distribution effects</li> </ul>	<ul style="list-style-type: none"> <li>❖ Budgetary costs</li> <li>❖ Carrying costs</li> <li>❖ Deadweight costs</li> </ul>	<ul style="list-style-type: none"> <li>❖ Possible resistance from tenants and cash-strapped owners</li> </ul>	<ul style="list-style-type: none"> <li>❖ Potential rent seeking by banks</li> </ul>

Source: Chapters 1 and 2 of *Brick by Brick - Vol.2*

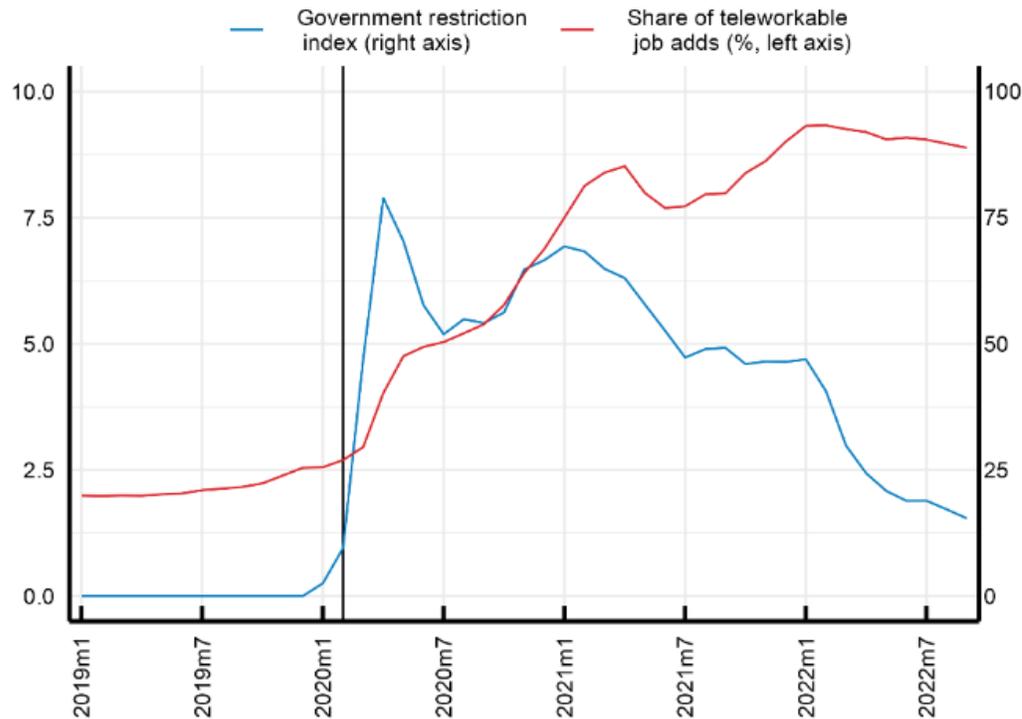


# Change in the geography of housing demand in the wake of COVID-19



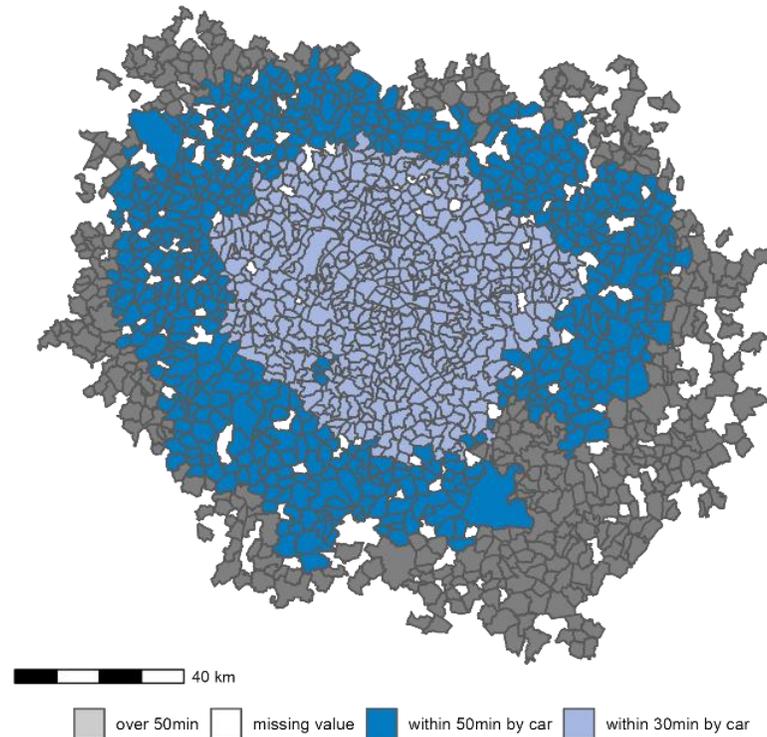
# COVID and work from home change housing preferences

## Teleworking will stay



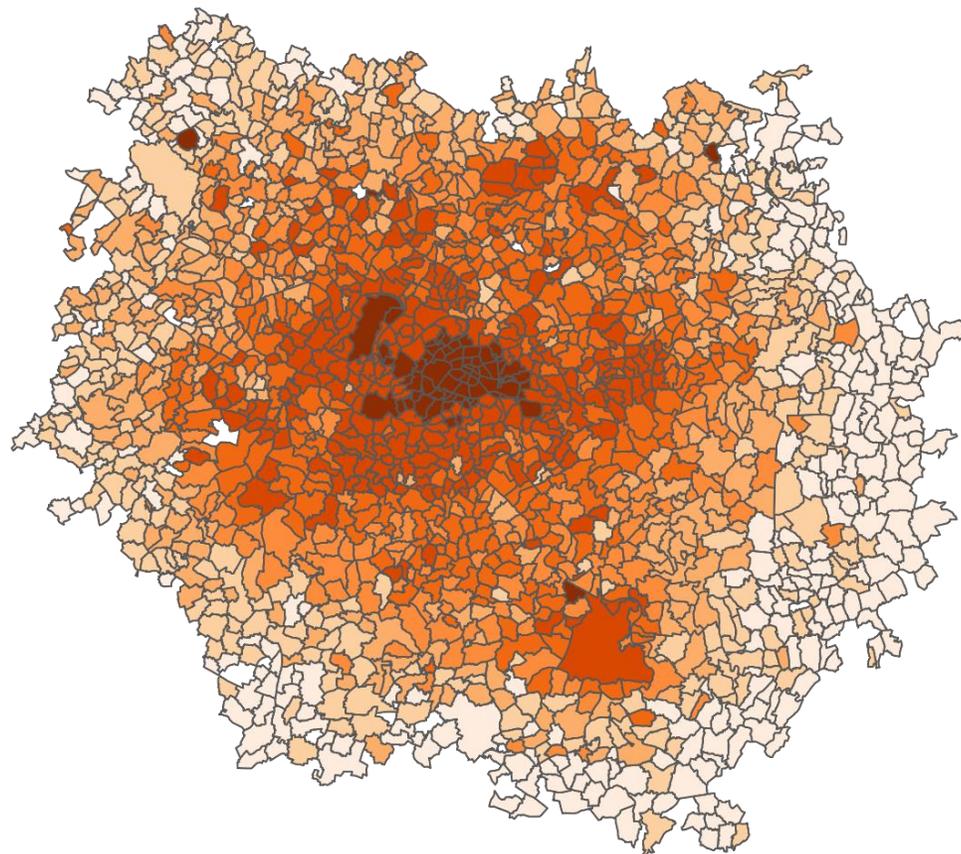
## New spatial balance between workplace and home

Access to strong economic and social activities, Greater Paris area.

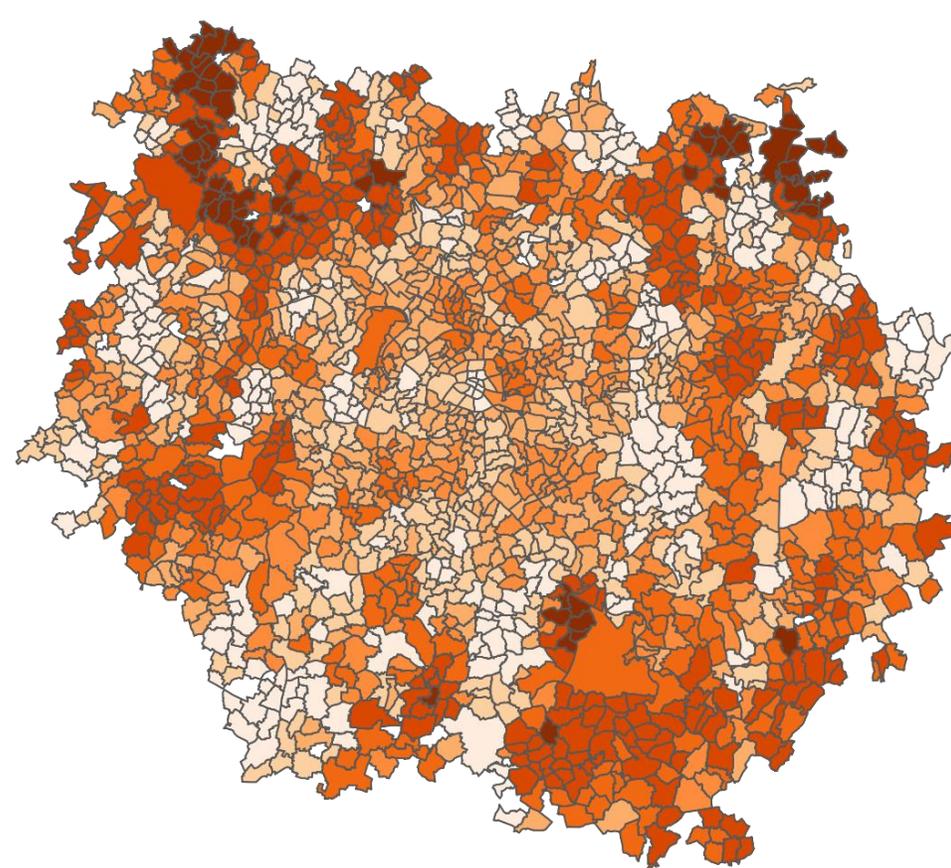


# Disaggregated house price data - Paris region

Paris FUA  
House Price, 2021



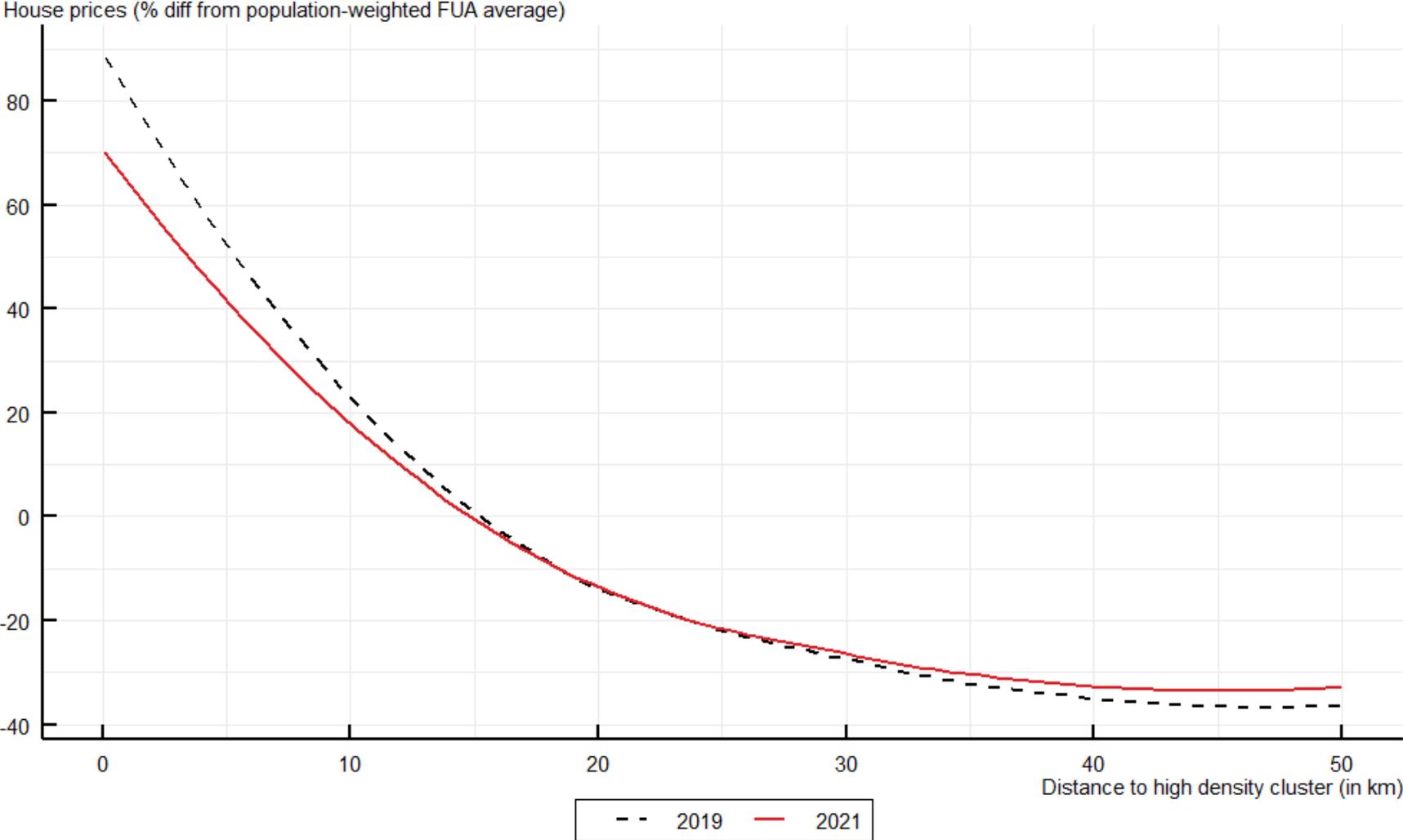
Paris FUA  
Change in prices from 2019 to 2021, percent



Source: Demandes de valeurs foncières (DVF): <https://www.data.gouv.fr/fr/datasets/demandes-de-valeurs-foncieres/>



# The price differential for residential real estate has flattened out on average within large metropolitan areas



# Policies can promote the shared benefits of the new residential geography and better urban environmental conditions

	Reform of spatial planning and land use	Reform of the rental regulations	Shifting the taxation of wealth	Support for digitization	Drawing up land value increases	Construction of social housing in high-quality areas
Examples	Increasing the flexibility of regulations, in particular densification	More balanced and flexible rental rules	From transaction taxes to recurring taxes	Provision of high-speed Internet Ensuring access to digital training	Use of mechanisms for recording the value of land	Provide public housing and affordable housing in areas that will benefit from environmental improvements.
Advantages	Closes the offer on Brakes the price increase Reduces the risk of urban sprawl	Facilitates mobility	Facilitates mobility	Reducing the digital divide	Prevents speculation and better distribution of profits	Facilitates access to high environmental quality
Restrictions	Vulnerable to political-economic headwinds	May put low-income tenants at risk	May require compensatory measures	Costly for governments and/or employers	Can be complex	Causes budgetary costs

Source: Chapters 1 and 4 of Brick *by Brick: Better Housing Policies - Volume II*.



# THANKS !

<http://www.oecd.org/Housing/>



**JUST RELEASED**

## **Brick by Brick (Volume 2) Better Housing Policies in the Post-COVID-19 Era**

