



REDUCING  
HOUSING  
INEQUALITIES

# Alleviating negative social consequences of sustainability policies in urban areas

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# ReHousIn: a new Horizon Europe project

- The European Union has announced an ambitious green transition in a time of polycrisis. Meanwhile, housing and housing inequalities have become an increasingly pressing issue, partly linked to the green transition.
- The ReHousIn project (2024-2027), funded by the EU's Horizon Europe programme, aims to better understand, identify and mitigate the impacts of the green transition on housing inequalities.
- The project will explore the impacts of implementing green interventions through examples of energy-efficient building renovations, nature-based solutions and densification to counter urban sprawl.
- These often lead to negative social externalities such as displacement of poorer households or green gentrification.



# The challenge: sustainable and socially just transition, taking climate change into account



Social impacts of decarbonization policies in cities vary considerably: **some initiatives are helping those most in need**, while others are **exacerbating inequality** and leaving behind communities.

# The ReHousin consortium

- Leader: Metropolitan Research Institute, Budapest.
- Consortium partners:
  - TU WIEN Technische Universität Wien,
  - UNIVIE Universität Wien,
  - UAB Universitat Autònoma De Barcelona,
  - SCIENCES PO Fondation Nationale Des Sciences Politiques Paris,
  - POLIMI Politecnico Di Milano,
  - NMBU Norges Miljø-Og Biovitenskaplige Universitet Oslo,
  - UNIŁODZ Uniwersytet Łódzki,
  - ICLEI European Secretariat,
  - ETH ZÜRICH Eidgenössische Technische Hochschule Zürich,
  - UCL University College London.



# 1. Energy-saving retrofitting of residential buildings



## ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

- Member States are obliged to reduce the primary energy use (in kwh/m<sup>2</sup>/year) of the total housing stock, with the aim of achieving a zero emission building stock by 2050
  - by at least 16% by 2030 (compared to 2020)
  - by at least 20% by 2035
- 55% of this reduction must be achieved by renovating the worst 43% of the national building stock.
- To reduce the primary energy use of the total building stock, Member States should introduce measures such as:
  - minimum energy performance standards for non-residential buildings
  - technical assistance
  - financial support measures

# Potential social consequence: renoviction

- 'Renoviction' combines the words 'renovation' and 'eviction' to create a term used when tenants receive an eviction notice, not because the tenant has done anything to break the terms of the tenancy, but because the landlord wants to renovate the property - usually to increase the rent.
- In regulated rental markets, rents can only be increased by a certain % per year with the same tenant, but as soon as the tenant leaves the property, the landlord can set a new, higher rent for the next tenant. Thus, renovation of the dwelling is a pretext to increase the rent.

# The Hague south-west: regeneration of post-war housing estates

Housing Corporation's housing programme 2020-40: 1,776 demolitions, 292 renovations, 5,500 new-build dwellings (of which 2,920 social housing)





# Montreal





Renoviction. Source: <https://nowtoronto.com/lifestyle/how-do-i-avoid-getting-renovicted-toronto/>

## 2. Nature Based Solutions

Nature-based solutions are measures inspired and supported by nature to provide practical, cost-effective and resilient solutions to various societal problems, from climate change mitigation to biodiversity conservation and beyond (EC, 2015).

This is an approach proposed and supported by the EU, but still poorly adopted in national plans/strategies.




European Commission, 2015. Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities: Final Report of the Horizon 2020 Expert Group on Nature-Based Solutions and Re-Naturing Cities. Brussels <https://ec.europa.eu/research/environment/pdf/renaturing/nbs.pdf>, p. 4; source image, p. 7

Source: Roberta Cucca, 2024

# Main goals of NBS interventions

- ✓ Improve the environment, make cities more attractive and enhance human well-being.
- ✓ Restoring degraded ecosystems
- ✓ Adapting to and mitigating climate change can provide more resilient responses using nature-based solutions and increase carbon storage.
- ✓ Improving risk management and resilience by using nature-based solutions can provide greater benefits than conventional methods and offer synergies in reducing multiple risks.

Research & Innovation Agenda on Nature-Based Solutions and Re-Naturing Cities	
Goals	Research & Innovation Actions
Enhancing sustainable urbanisation	 Urban regeneration through nature-based solutions
	 Nature-based solutions for improving well-being in urban areas
Restoring degraded ecosystems	 Establishing nature-based solutions for coastal resilience
	 Multi-functional nature-based watershed management and ecosystem restoration
Developing climate change adaptation and mitigation	 Nature-based solutions for increasing the sustainable use of matter and energy
	 Nature-based solutions for enhancing the insurance value of ecosystems
Improving risk management and resilience	 Increasing carbon sequestration through nature-based solutions

European Commission, 2015. Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities: Final Report of the Horizon 2020 Expert Group on Nature-Based Solutions and Re-Naturing Cities. Brussels <https://ec.europa.eu/research/environment/pdf/renaturing/nbs.pdf>, p. 4; source image, p. 7

# Potential housing consequences: Green gentrification and growing housing inequalities



Green-



Climate-



Blue- gentrification in Oslo

# Green gentrification and housing inequalities

Removing environmental pollution or providing green infrastructure increases local property values and attracts wealthier residents to a previously polluted or deprived neighbourhood, changing the social composition of the area.

This leads to gentrification driven by greening/environmental strategies, initiated by private actors, local institutions or environmental activists, with consequences relevant to socio-spatial inequalities.



Source: Roberta Cucca, 2024



Green gentrification. Source: <https://undisciplinedenvironments.org/2019/11/05/18624/>

# 3. No more land take and densification of cities

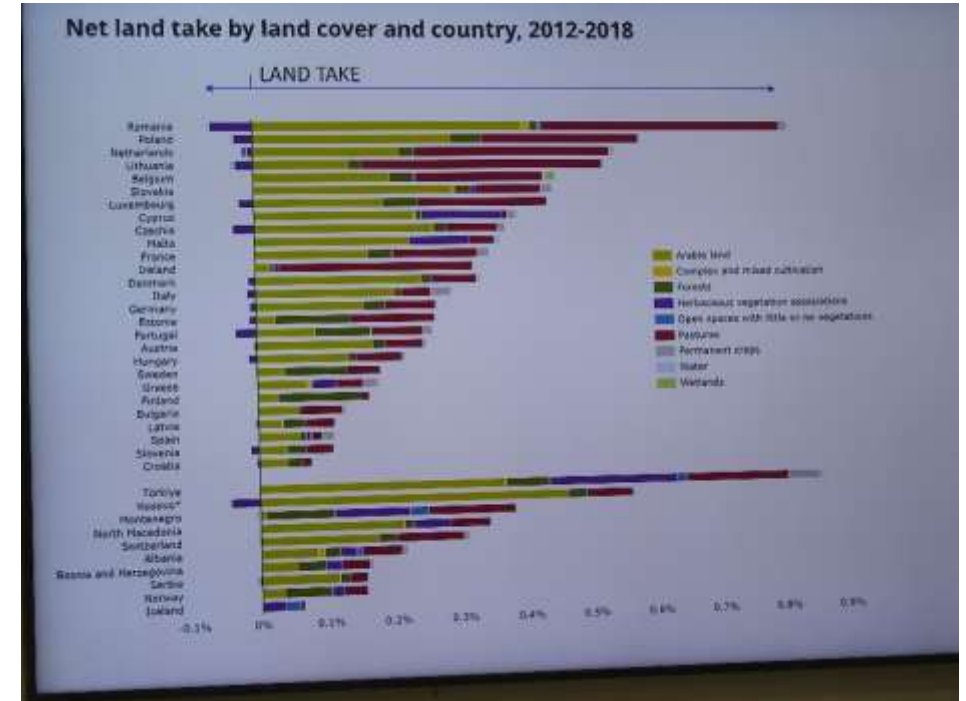
- The EU Biodiversity Strategy 2030: the biggest threat to biodiversity is the encroachment of green spaces
- The EU Nature Restoration Regulation Art. 8 (August 2024) calls for a net loss of urban green spaces to be halted by 2030 and a 5% increase by 2050.
- Potential tension with housing needs (see discussions on densification and “green belts” and “urban growth boundaries”)

# Serbia, Vojvodina: shrinking cities with lots of new housing

## Romania: shrinking country with high net land take

A significant proportion of post-socialist cities are shrinking. In many of them, however, new housing construction is still dynamic, even if it is not really needed.

- Zrenjanin (Serbia) has lost 20% of its population in the last 20 years.
- Romania will lose 5% of its population between 2010 and 2020.



# Main forms of densification of cities

Soft,  
incremental



Plate 12: A condominium renovation project under National Outline Plan 38 (Tama 38) in Israel before (left) and after (right) renovation (Source; Hanani, 2015).

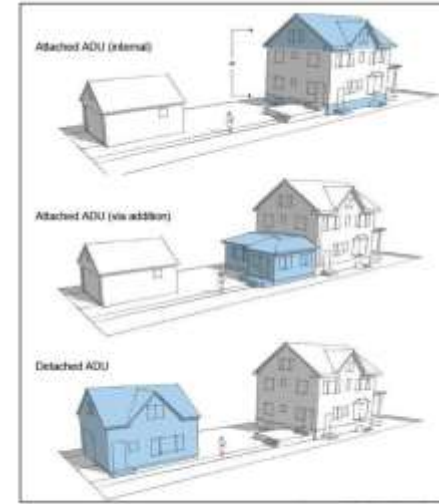


Figure 9: Examples of Accessory Dwelling Units (ADUs) provided by the City of St. Paul, Minnesota (ADUs in blue; main residence in white) that help increase the city's Plot Coverage (Source: City of St. Paul, 2019).

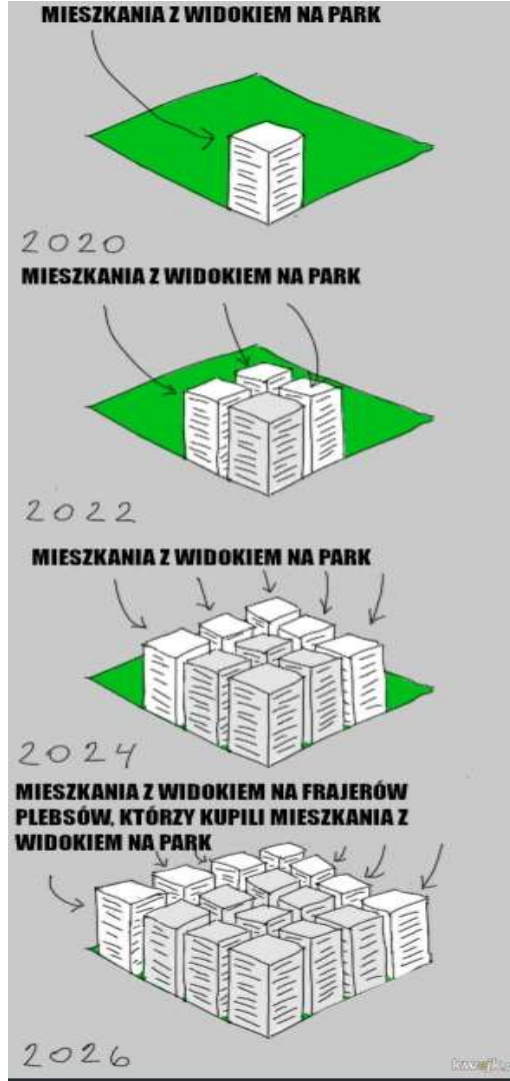
Hard,  
radical



Israel: pinui-binui



Moscow: eliminating Khrushchevskis



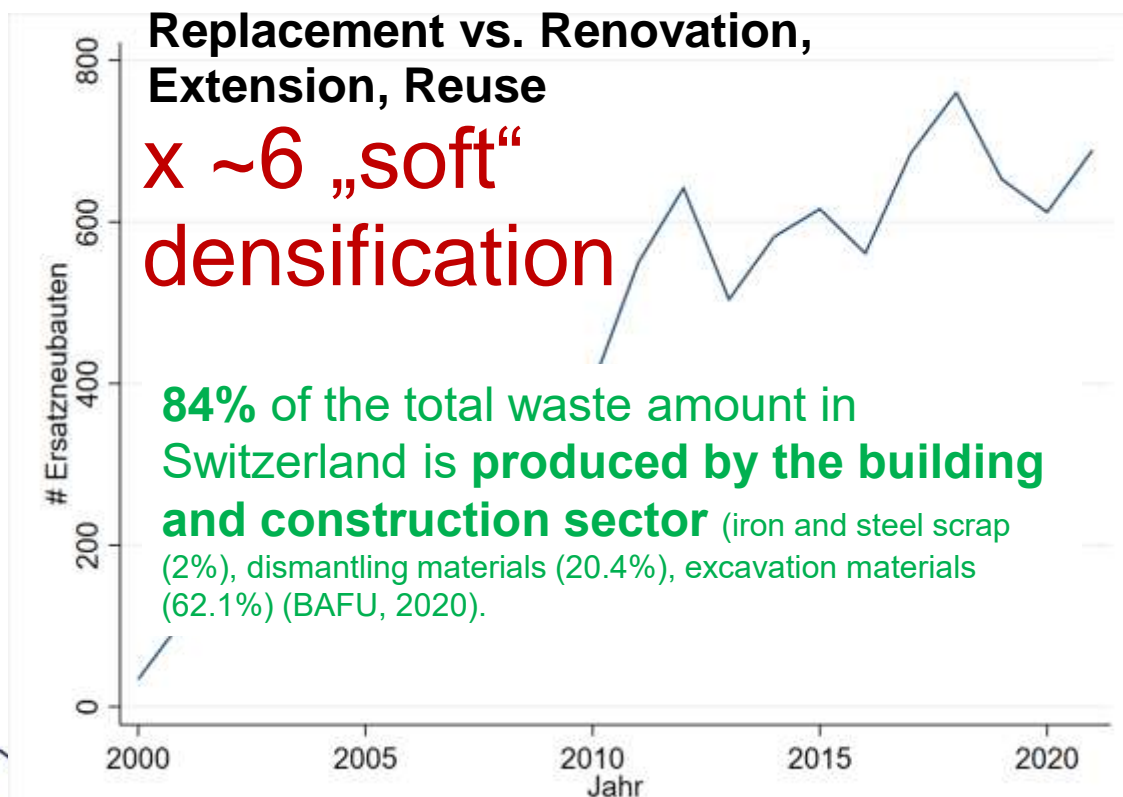
## Consequences of increasing housing densities

Increasing density leads to a deterioration in the quality of life: as density increases, new residents hoping for park views instead only get views of other residents who thought they were buying park-view homes.

Source: <https://kwejk.pl/obrazek/3475031/rozbudowa-infrastruktury.html>

# Densification in the cities, examples from Zürich

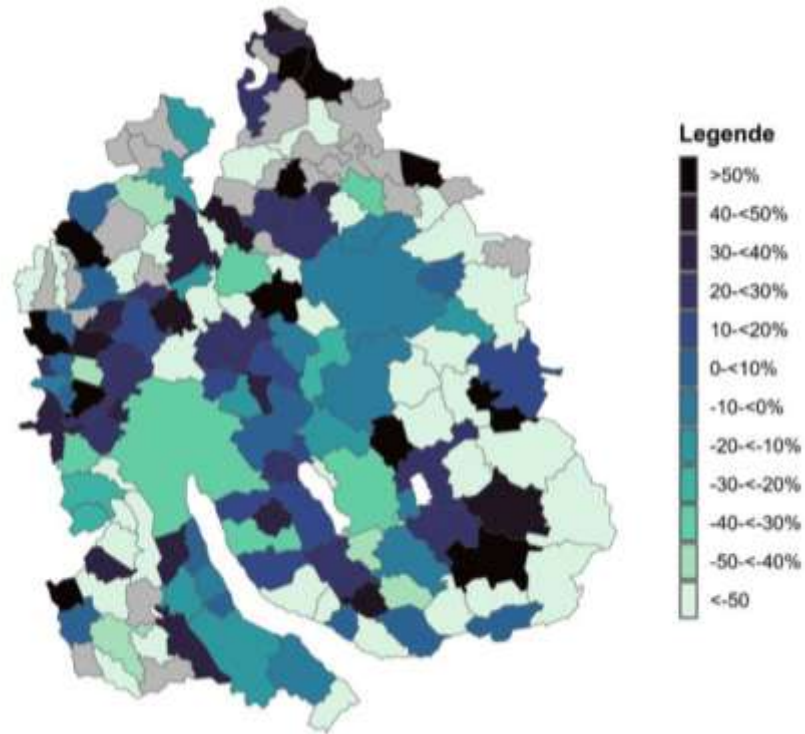
- 600-700 complete redevelopments in the canton of Zurich per year (2015-2020)
- 80-100 “soft” densified buildings per year (renovation, extension, reuse)
- +21,2 % increase in living space per room in buildings constructed since 2000
- The result is not an increase in occupancy density (persons/m<sup>2</sup>), but an increase in building density.



Lutz, E.; Kauer, F.; Kaufmann, D. (2023): Mehr Wohnraum für Alle? Zonenplanänderungen, Bauaktivität, und Mietpreise im Kanton Zürich von 1996-2020, <https://doi.org/10.3929/ethz-b-000603242>, ETH Zürich.

# Who are the losers of densification through regeneration?

## Destinations of residents forced to move after renovation or complete regeneration (2014-2020)



- Residents who are forced to move are moving to agglomerations (Regensdorf, Buchs, Bülach, Weiningen, Dietikon, Schlieren or Adliswil).
- Low-income earners, foreigners and single parents are more affected by the need to move than the rest of the population.

Source: Kaufmann, David, Elena Lutz, Fiona Kauer, Malte Wehr, und Michael Wicki. 2023. Erkenntnisse zum aktuellen Wohnungsnotstand: Bautätigkeit, Verdrängung und Akzeptanz. Bericht ETH Zürich. DOI: 10.3929/ethz-b-000603229

# Green interventions and housing consequences

- Green interventions **differ in their housing consequences**: building retrofit, urban densification, nature based solutions might be the ranking from direct to indirect.
- The analysis of green interventions shows that **different levels are possible for green interventions**, resulting in different levels of price/value increase, leading to different housing and social consequences
- Under **market conditions** the increase of the level of the green intervention leads to increase of the negative housing and social consequences.
- How could the **optimization of the two aspects be achieved**, with ensuring a minimal level (and avoiding a big drop) of the negative housing/social impact?

# Drift through urban space and time

Position of communities in fragmented urban space.

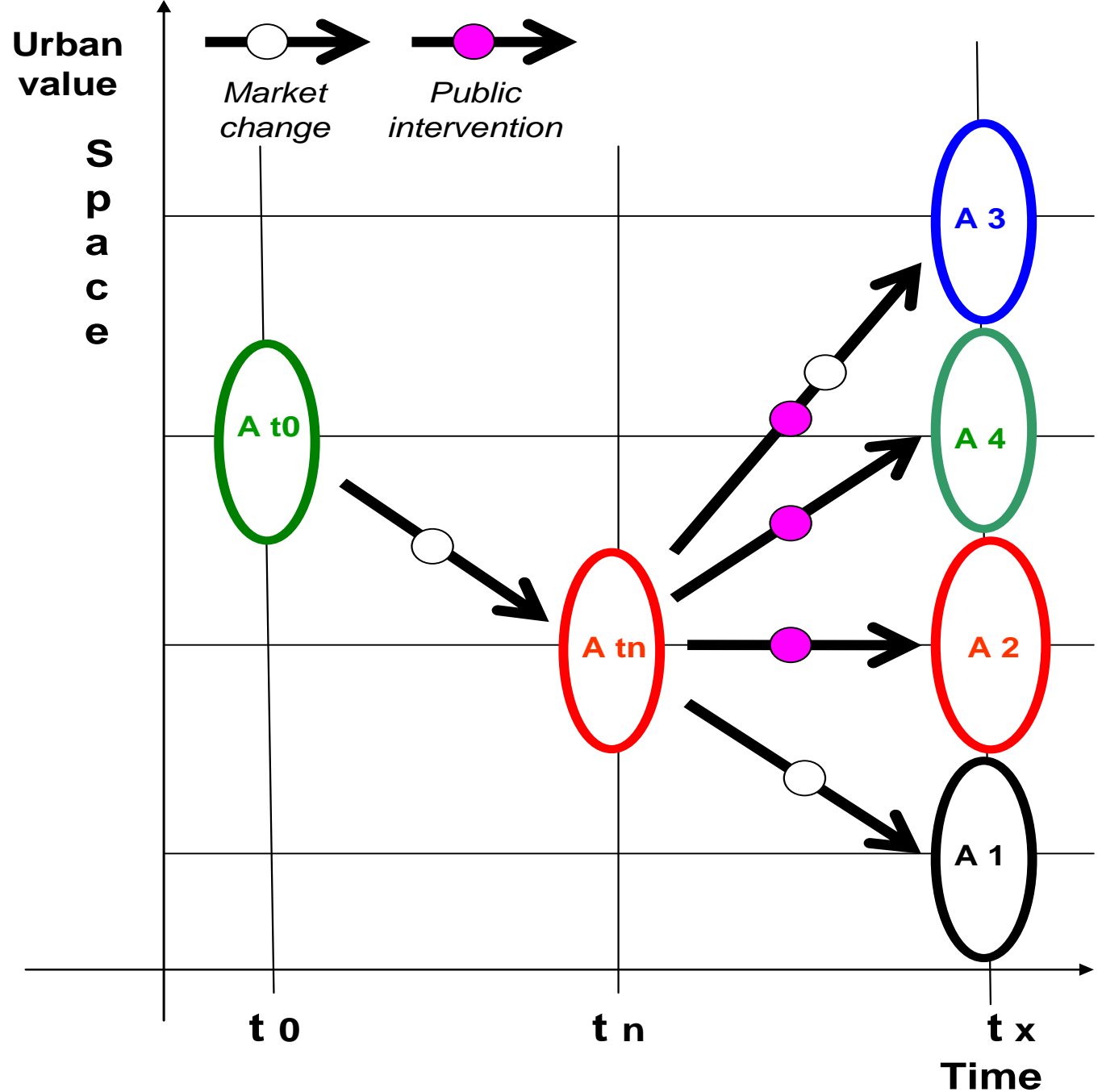
Which strategies?

A1 decline

A2 steady state

A3 gentrification

A4 coherence  
best practice



# Observations from Policy Labs in ReHousIn

- harmonize public policies among **various levels of governance** (the EU, the central state, regions, and municipalities), applying the subsidiarity principle until it makes sense
- consider the difference in impact of green transition measures on housing according to the **size of the city, its regional location and the pressure on the housing market in the region as a whole**
- green and social policies must be **thought together**, rather than sequentially or separately: need for integrated approaches.

- create **policies for all major tenure categories** (multiple home ownership, public rental, private rental), taking the different incentives of **owners and tenants** into account (e.g. owners receiving public subsidies while tenants facing rising costs)
- **avoid regressive incentive structures**, rewarding those already in possession of capital or access to financial services
- link **retrofit funding to longer-term affordability** conditions

- combine **object-based housing subsidies** (targeted at buildings) with **subject-based subsidies** (targeted at tenants and homeowners) to ensure that costs do not fall disproportionately on low-income households
- **involve the tenants into the decision about the level of green interventions**, broadened beyond consultation to meaningful co-creation of green spaces
- **communicate strategies with tenants and homeowners**, particularly about technical changes and costs, to increase **social acceptance among existing tenants and communities**

- **regulate and capture value increases** derived from retrofitting and NBS interventions, creating financial basis to mitigate the effect of environmental improvements on socio-spatial disparities
- **redistribute a part of the value increase** by property tax, betterment levy, mandating inclusionary zoning in all major urban developments
- increase the **institutional and organizational capabilities and readiness of the regional and local governments** and actors: develop capacities in city administrations (especially in in small and medium cities) to increase knowledge base, help data collection and monitoring, improve regulation, strengthen social protection, apply communication strategies

# Moderating housing inequality consequences

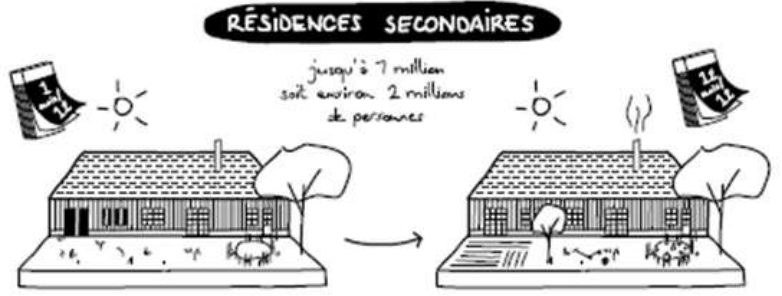
- Inequalities caused by one type of green interventions can be **offset directly** by subsidies to the vulnerable groups or **indirectly** by social interventions in the area.
- Green policies implemented by programs and projects in a **very short time frame** (e.g. RRF) might increase housing inequalities. Instead, long-term programming is needed, focused on community well-being, with the capacity to measure and govern social and territorial effects.
- **Tenants are usually left out from key decisions** about the building (retrofit, other structural work), their protection depends on the tenure form: public rental, private rental by one landlord, private rental in multi-ownership building.

# Sufficiency-resilience considerations

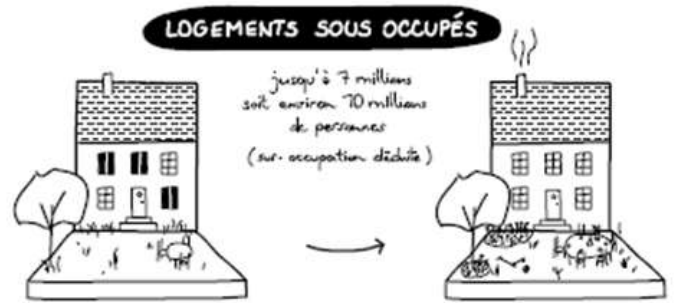
- Consider green and housing policies in their **wider resilience context** through coherent land-use policy that also integrates **service infrastructures and mobility issues**, coordinate land use and housing policy **across municipal boundaries**
- Prioritize the systematic enhancement of **building reuse**, promoting the environmentally **low-impact and socially accessible reactivation of the existing building stock, reusing vacant homes and brownfields** rather than massive new construction.
- Incentivize **soft densification**, such as rooftop additions, subdividing large flats, or adapting vacant buildings, especially when paired with affordability guarantees.



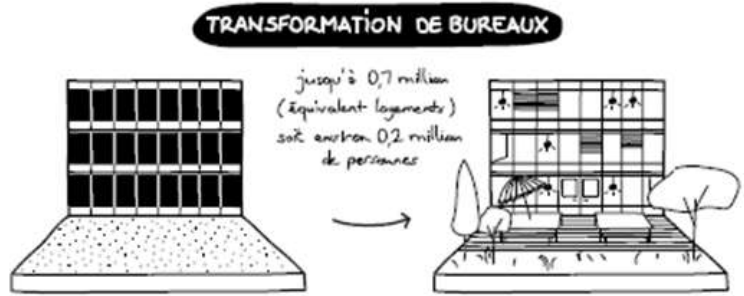
1 Million



1 Million



7 Millions



0,1 Millions

Reserves for housing, instead of new building, in France

<https://bonpote.com/philippe-bihouix-pour-construire-mieux-nous-naurons-dautres-choix-que-de-construire-moins/>

Philippe Bihouix: "To build better, we will have no other choice but to build less"

# Sufficiency policies in practice

Sufficiency policies can take many forms and must be based on an **appropriate assessment of social, distributional and environmental impacts** to ensure they generate the full potential of positive impacts across the board. Pursuing sufficiency on a sectoral basis could include:

- Transport, mobility
- Energy, buildings and spatial planning
- Materials, products, food and water
- Cross-sectoral: taxation and finance, governance forms

# Lille Métropole



Lille: local urban plan for 95 municipalities, planning **80% of new development within the existing urban fabric**, imposing high density coefficient

# Stationary, resilient metropolitan areas

Urban change based on **optimising, exploiting and transforming the existing infrastructure**

- applying **new mobility strategy across the whole urban region**, based on **accessibility** instead of mobility
- linking **energy efficient renovation on housing areas with other resiliency goals** (eg less parking to allow more green)
- addressing **social problems innovatively**, as during the pandemic: eradicate **homelessness** (conversion of buildings) and **poverty** (minimum income)

Emerging examples: **Girona (FUA of 131,000)**. Leftist-municipalist party experiments with “**postgrowth metropolitan policy**”: integral **renaturalization**, increase of tree cover, urban gardening, wetland restoration, in terms of **environmental justice**.

## Girona - a postgrowth municipality

Testing ground for degrowth policies.

Girona City Council will become the first administration in Catalonia and in Spain as a whole to explore degrowth.

In early 2024, we signed a world-first “**post-growth memorandum of understanding**” with Girona, pledging to research and implement adjustments to the city’s economy for it prioritises planetary & human well-being, over endless economic growth.

Collaboration agreement with the Research and Degrowth International Association, linked to ICTA-UAB, and the University of Girona.

The aim of the project is: ‘We need to break through the poverty. **Degrowth is not a return to the caves**’. (Girona's councillor for Climate Action)



## What could a postgrowth Girona look like?

The new urban economy has relocalised production of many things which were being imported, focusing on biomaterials, and things that are neither detrimental nor useless.

Economic wealth is better distributed as a result of wealth taxes, achieved by joining forces with other cities around the country to "influence upwards" to change national policies.

The city administration and citizens are aware of resource flows to and from the city, its immediate hinterland, and the rest of Catalonia, and these links are valued and fostered.

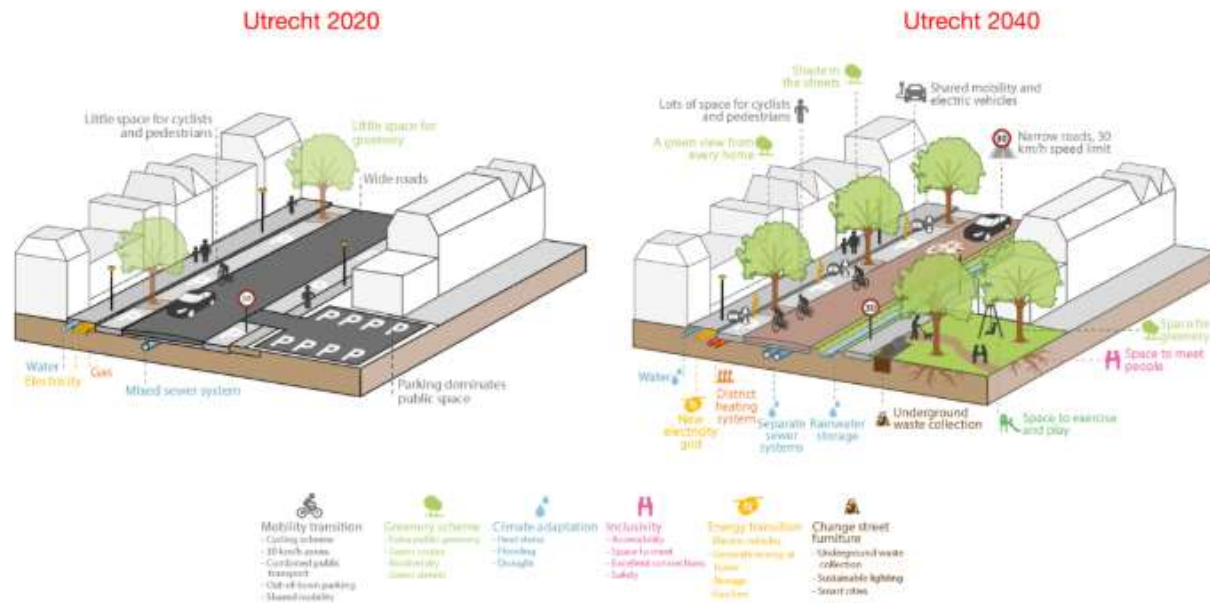
Profit and work are shared more widely than before, meaning more jobs and less working hours.

Collective luxury is understood, and valued over individual accumulation.

Economics is taught differently, from a young age, based on the idea that the Economy takes place inside the Environment, rather than simply using it as a free pot of resources.

# Utrecht 2040

Turn the city in 10 minute neighbourhoods with urban hubs, excellent transport network, green corridors to make the most of everything nearby.



## Utrecht in 2021

- little space for cyclists and pedestrians
- little space for greenery
- wide roads, 50 km/h speed limit
- parking dominates public space
- in the ground: water electricity, gas, mixed sewer system

## Utrecht in 2040

- lots of space for cyclists and pedestrians
- a green view from every home
- shade in the streets
- shared mobility and electric vehicles
- narrow roads, 30 km/h speed limit
- space for greenery
- space to meet people
- space to exercise and play
- in the ground: water, new electricity grid, district heating system, separate sewer systems, rainwater storage, underground waste collection

# New policies are needed on all levels

- **Cities and metropolitan areas should play key role** in the resilient, inclusive, post-growth-oriented transition, cooperating with civil society and innovative governance: **visionary strategic planning** is needed
- **Countries** can act innovatively, mobilising production capacity towards democratically decided goals, **limiting the influence of capital over the national economy.**
- **New EU wide policies** are needed: while continuing Green Deal, **strengthening the frameworks for resiliency** (no more land take, taxonomy) and **environmental and social justice.** New **enabling conditions** might help to achieve **more coordinated changes on national and metropolitan/urban area level.**
- **World-wide international collaboration** is crucial, such as the **fossil fuel non proliferation treaty,** and limiting capital flight by **capital control.**

Thanks for your attention!



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