HOUSING CONSEQUENCES OF SUSTAINABILITY POLICIES ON METROPOLITAN LEVEL

Iván Tosics
Metropolitan Research Institute, Budapest

WS Governing metropolis – Land and Housing

ENHR'2024 Conference
DELFT, Netherlands, 27-30 August 2024

Structure of the presentation

- Introduction: EU Green Deal policy and the housing consequences
- 2. The consequence of "no more land take" policy: densification of existing urban areas
- Public policies and methods for densification of existing residential areas
- 4. The impacts of increasing residential density and the alleviation of negative externalities
- 5. The metropolitan aspects of densification policies
- 6. A more radical view: going beyond densification

Introduction

- According to Treaties: EU does <u>not</u>
 have any explicit competence in
 spatial, land use or urban planning,
 or urban policy, or housing...
- But many EU sectoral policies de facto influence spatial development patterns and policies at national, regional and local levels
- EU policies don't have same effects everywhere - mediated through national, regional and local contexts (literature on 'Europeanisation')



EUROPEAN SPATIAL PLANNING AND TERRITORIAL COOPERATION STEFANIE DÜHR, CLAIRE COLOMB AND VINCENT NADIN



Presentation of Claire Colomb, February 2024

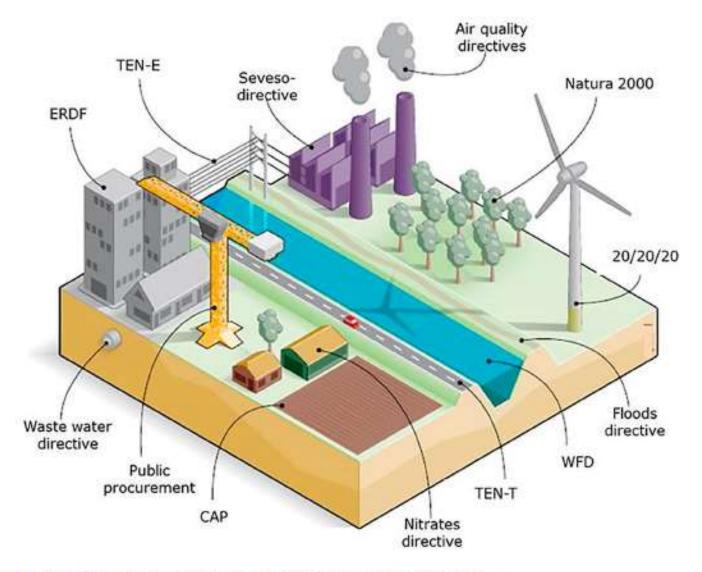
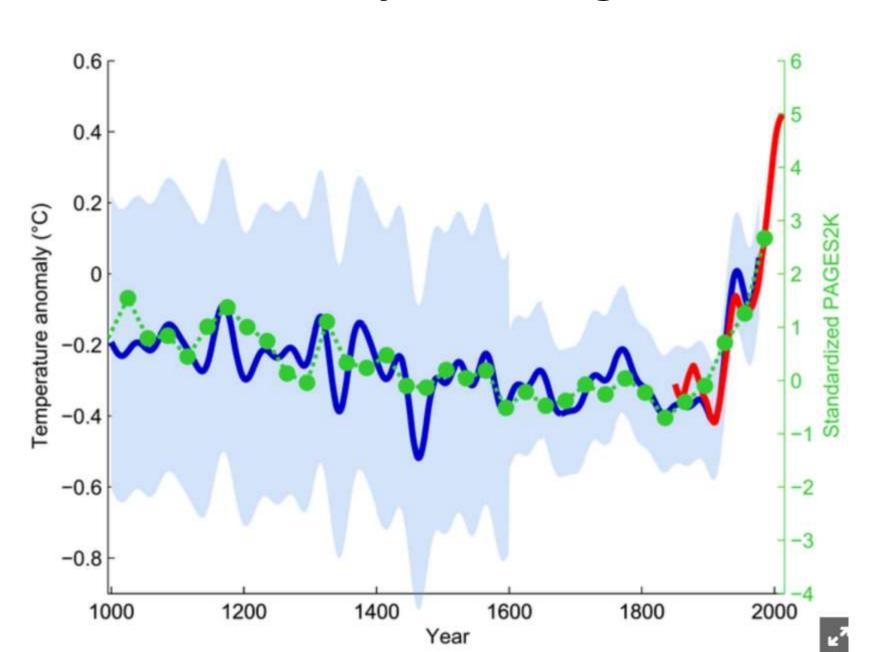


Figure 1. Hypothetical presence of EU policies relevant to planning.
Source: authors

Presentation of Claire Colomb, February 2024

Evers, D. & Tennekes, J. (2016) Europe exposed: mapping the impacts of EU policies on spatial planning in the Netherlands, *European Planning Studies*, 24:10, 1747-1765.

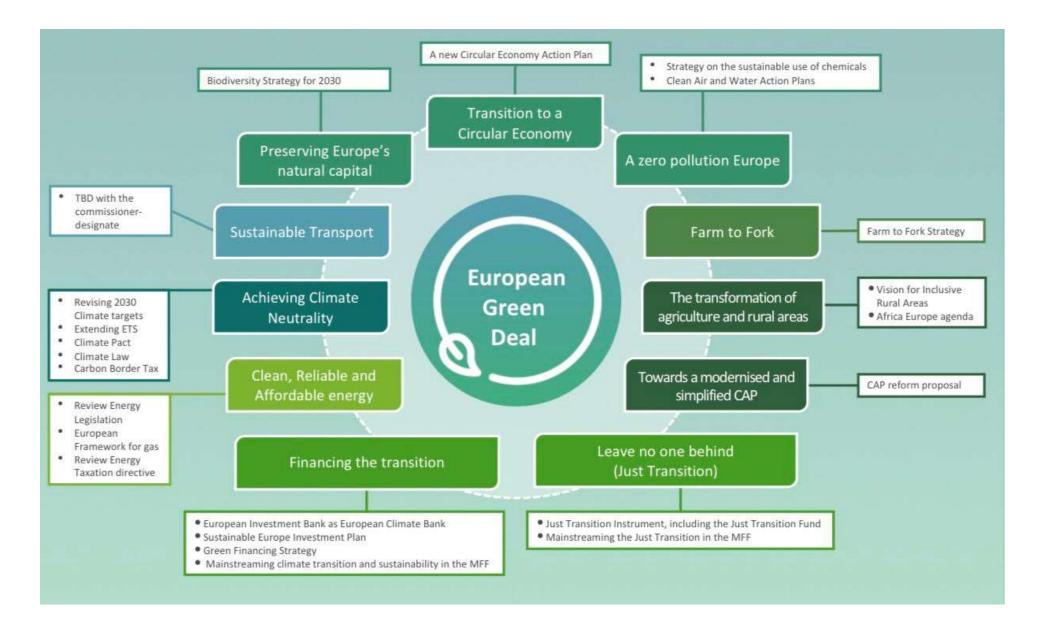
The hockey stick diagram





The European Green Deal

- On 11 December 2019, days after taking up her responsibilities, Ursula von der Leyen, announced a roadmap for key strategies and measures constituting a <u>European Green</u> <u>Deal</u> (EGD). This was endorsed by the European Council the following day.
- The commission tightens the EU greenhouse-gas **emission-reduction target for 2030 from 40 to 50-55 per cent**, compared with 1990.
- The goal of achieving climate neutrality by 2050 is to be given legal force, which would open up the possibility of legal action against EU institutions or member states in the case of insufficient efforts

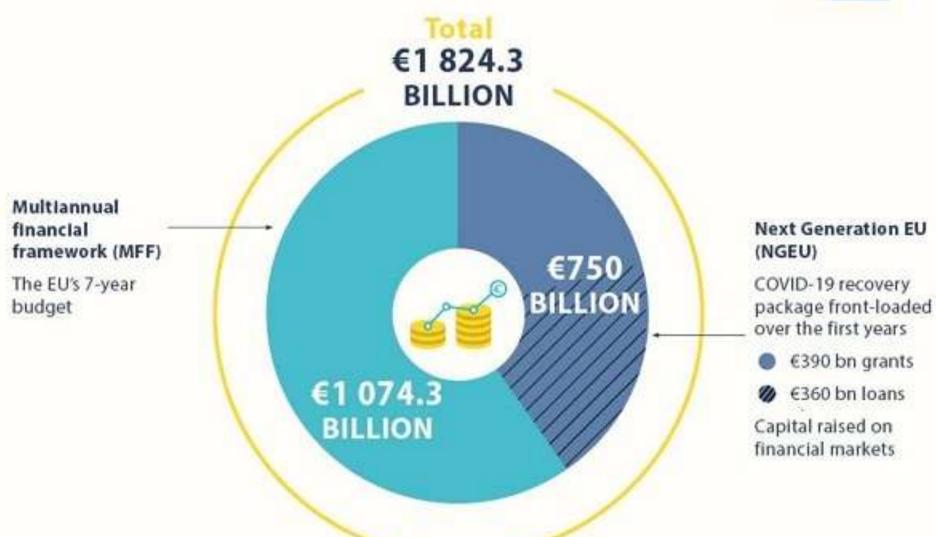


EU reaction on the COVID crisis

- In July 2020 there was a historic agreement reached in the European Council on a new temporary funding instrument, Next Generation EU (NGEU), which will provide up to €672.5 bn recovery fund in the form of a two-year temporary reinforcement of the budget, supporting a fair and just recovery in the EU. This will be additional to the seven-year Multiannual Financial Framework (MFF).
- With the NGEU the bulk of the money will be channelled to member states, providing the basis for massive public and private investments, focusing on creating jobs and repairing the immediate damage caused by the COVID-19 whilst supporting the Union's green and digital priorities.

Overall budget 2021-2027





Resilience and Recovery Facility

- Member States had to prepare recovery and resilience plans (RRP) that set out a coherent package of reforms and public investment projects, which have to be implemented by 2026.
- These plans have to address challenges identified in the European Semester, particularly the country-specific recommendations adopted by the Council
- Each plan has to include a minimum of 37% of expenditures related to climate and a minimum of 20% of expenditures to foster the digital transition.
- Allocation key of money involves also the observed and projected loss in real GDP over 2020-2021.



FIT-FOR-55

- Commitment by EU to become a climate neutral content in 2050: long-term decarbonisation strategy called the 'European Green Deal'
- Intermediary goal to reduce EU emissions by at least 55% by 2030 → 'Fit-for-55' policy package
- Central components are to decarbonise
 - European housing stock, 36% of its greenhouse gas emissions from energy in 2020
 - European transport, 25% of its greenhouse gas emissions from energy in 2020

Emission Trading System for Buildings and Transport (ETS II)



- ETS II extends the carbon trading mechanism to the building and transport sectors
- Through a gradual decrease of carbon allowances, prices for heating and fossil fuel will increase
- This should in turn incentivise the decarbonisation of heating in buildings and the decrease of traditional car use
- ETS II will (barring some exceptions) apply from 2027

SOCIAL CLIMATE FUND (SCF)



- The SCF will be established for the period 2026-2032 (one year before the introduction of ETS II)
- Shield vulnerable households from impact of ETS II
- Each Member State will submit a social climate plan to the European Commissions by 30 June 2025
 - Includes all the measures to shield vulnerable households from ETS II (both building occupants and transport users)
- SCF is expected to raise 65 billion EUR from the auctions of ETS II
- +- 5 billion EUR will be added from auctioning of 50 million allowances under ETS I
- Member State will contribute 25% of their own resources
- +- 86 billion EUR available in total (Hungary's share is 2,82 billion EUR)



The challenge: A sustainable and socially just transition in the built environment





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 new ReHousIn Horizon Europe project

- As Europe navigates the challenges of recent crises and embraces the ambitious EU green transition, housing inequalities have become a pressing concern – partly linked to the green transition
- The ReHousin project (2024-2027), funded by the EU Horizon Europe programme, aims to better understand, identify and mitigate the impacts of the green transition on housing inequalities.
- The implementation of green interventions is explored on the examples of energy retrofitting, nature based solutions, densification
- These often lead to negative social externalities, such as renoviction, green gentrification, displacement of poorer households

Quantitative analysis in 9 countries

- ReHousIn conducts a comparative, multi-level analysis in 9
 European countries: Austria, France, Hungary, Italy, Norway, Poland, Spain, Switzerland, United Kingdom
- Territorial focus on three spatial level in each country:
 - attractive metropolitan regions,
 - middle-sized cities
 - rural areas
- This qualitative work, besides quantitative analysis, means a mixed-method project design.

The 27 case studies

- A quantitative data analysis on recent trends in housing inequalities and their relation to crises across different levels of urbanization will provide the framework for 27 local cases studies
- The qualitative work in the 27 locations will explore the impact of multi-level trajectories of housing-systems, welfare regimes and environmental policy instrumentations on the (re)production of local housing inequalities and the emergence of inclusive housing initiatives are analyzed.
- Based on this, ReHousIn compares mechanisms of differentiation feeding into policy labs, aiming to formulate recommendations on how to tackle negative social externalities related to the EU green transition at EU, national and local levels.

The ReHousin Consortium

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

Session 1 I «Densification Through Sustainable Land Use (Re)Development»

Discussion I ReHousIn Project



<u>Definition of and linkages to the concept/policy of densification</u>

- What do we mean when we speak of 'densification' in different national contexts?
- Do we refer to an environmental <u>policy</u> or policy <u>goal</u>? Or do we refer to it as a <u>process</u>?
- Is it a process leading to <u>building</u> vs. <u>use density</u>?
- Do we need a joint definition of what we mean by 'densification' in the project?

Implementation of EU policies at the national level

- How are EU policies (e.g., Green Deal, Land Use Policies) implemented at the national levels?
- Particularly, in regard to residential densification? (e.g., policy goal, strategic documents, law/legislation)

Socio-economic and <u>-environmental effects</u> of densification at the local level

- How do national densification laws/policies effect housing inequalities at the local level?
- How do public and private actors at the local level manage to tackle housing inequality challenges in densifying environments (e.g., personnel, finances, know-how, property rights)?

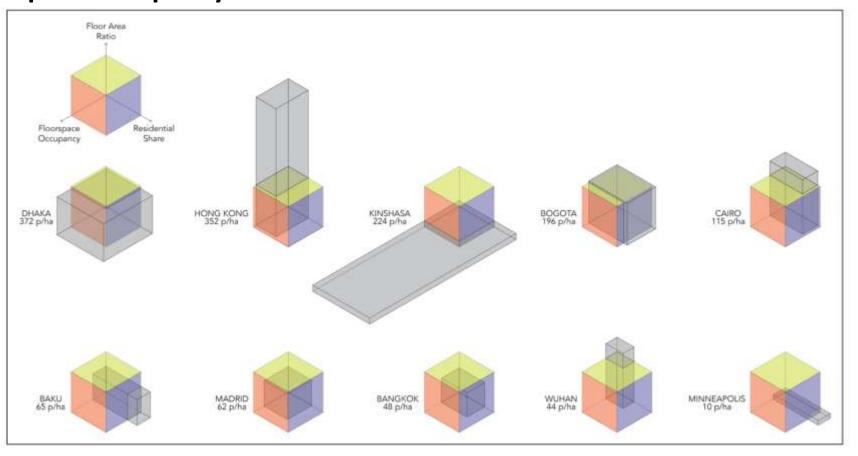




ETH Wohnforum
ETH CASE

ETH Zürich I IRL Institut für Raum- und Landschaftsentwicklung I www.irl.ethz.ch

WHAT IS URBAN DENSITY? Floorspace occupancy × floor area ratio × residential share = urban density



Source: Solly Angel, Patrick Lamson-Hall: Anatomy of density: measurable factors that constitute urban density, 2020

Public policies aiming to achieve higher density

Public policies might aim for

- larger population density within the dwelling units,
- higher buildings with more units on the same plot, or
- larger share of residential plots in the area.

The first factor can be influenced by housing and taxation policies (allocating flats to larger families, taxing empty or 'underused' dwellings), while the latter two are matters of building regulations, construction financing and subsidization rules.

Soft, incremental



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



Israel: pinui-binui

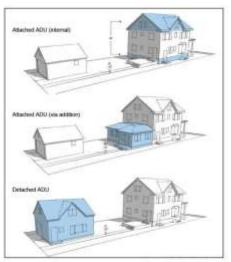
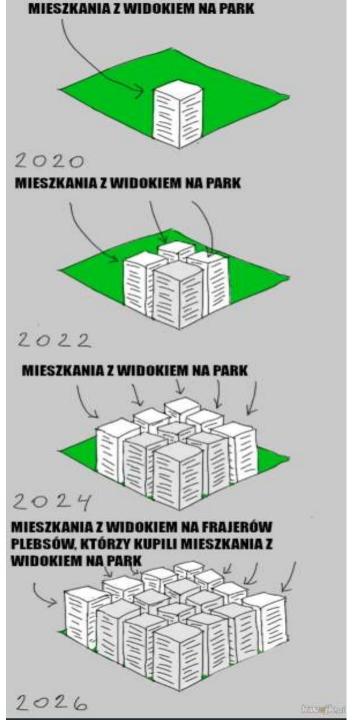


Figure 9: Examples of Accessory Dwelling Units (ADUs) provided by the City of St. Paul, Minnesota (ADUs in blue; main residence in white) that help increase the city's Pfot Goverage (Source: City of St. Paul, 2019).



Moscow: eliminating Khrushchevskis

Hard, radical



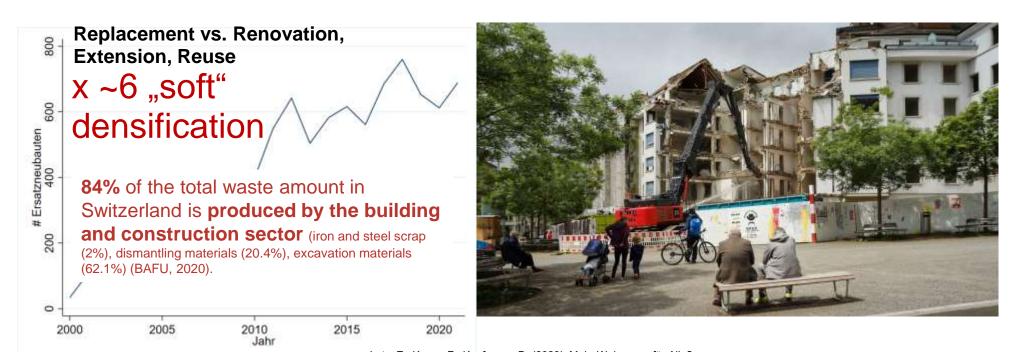
The impacts of increasing residential density

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

The deterioration of quality of life linked to densification: as densification is progressing, new residents, hoping for a park-view, get instead only a view on other fouls who thought to buy such apartments with a park-view.

How is densification implemented at the local level? – Examples from Zürich

- 600-700 total replacement construction in the canton of Zurich per year (2015-2020)
- 80-100 "softly" densified buildings per year (renovations, extensions, reuse)
- +21.2 % increase of housing space per room in buildings built since 2000
- Increasing of building density, not use density (number of people per m²)

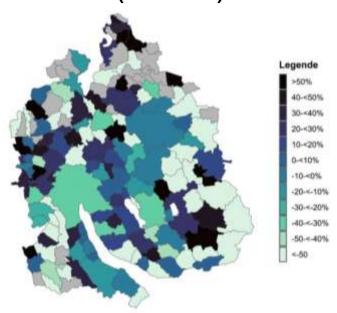


ETH Zürich I IRL Institut für Raum- und Landschaftsentwicklung I www.irl.ethz.ch

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 gets densified through total replacement construction?

Target municipalities for residents, which have to move after renovation or total replacement construction (2014-2020)



 Evicted residents move to agglomeration municipalities, e.g., Regensdorf, Buchs, Bülach, Weiningen, Dietikon, Schlieren, or Adliswil.

 Low-income, foreigners and single parents are affected more by eviction 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



SPUR

ETH Wohnforum

ETH Zürich I IRL Institut für Raum- und Landschaftsentwicklung I www.irl.ethz.ch

The impact and process of densification

Impact of higher density

- correlates with more sustainable modes of transport
- affects negatively the environment: biodiversity, ecological conditions and the microclimate
- has dubious effects on social interactions, wellbeing, psychological health

How to get densification accepted:

- create new positive image (like garden city centre),
- create first the new amenities and only later more dense housing in order people accept this in areas where such density was never existing
- start with step-by-step regulatory changes, leading to spontaneous processes

Understand the place: TOD types

- Primary Metro: located at a Metro-Metro transfer station; 1,000-meter walk radius
- Secondary Metro: located at a Metro-BRT transfer station; 800meter walk radius
- Tertiary Metro: located at a single Metro station; 600-meter walk radius
- BRT Center: located at a BRT-BRT transfer station; 600-meter walk radius
- BRT Corridor: located along a BRT route, 800-meter total width (400 meters on either side of BRT route)

Public intervention policies and tools

- Multi-level governance: create densification framework on national/regional level, while allow the rest to come bottom up, allowing for flexible answers from the side of the municipality and the developers
- Tools: zoning (density), taxation of value increase, social inclusion (rent control, inclusionary zoning), parking regulation, price of public transport
- Target groups and stakeholders: landowners, houseowners, tenants, developers





Me: Whew, 2021 will be great finally getting past this covid thing

Universe: hold my beer



3:47 PM · Jan 4, 2021



The short and medium term outlook

- World Economic Forum: The Global Risks Report 2024
 presents the findings of the Global Risks Perception
 Survey (GRPS), which captures insights from nearly
 1,500 global experts.
- In the ten year perspective the risk assessment is very bleak, with nearly two third of respondents seeing real risk of major collapse in global systems by 2034.

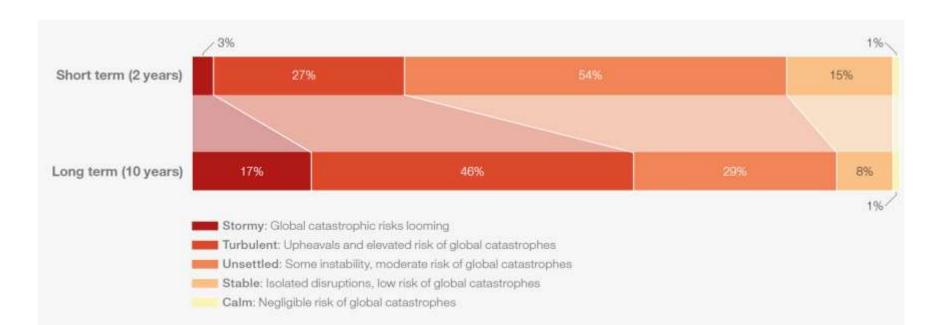


FIGURE C

2 Magre

Global risks ranked by severity over the short and long term

"Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period."

Risk categories Economic Environmental Geopolitical Societal Technological

2 years	
1 st	Misinformation and disinformation
2 nd	Extreme weather events
3 rd	Societal polarization
4 th	Cyber insecurity
5 th	Interstate armed conflict
6 th	Lack of economic opportunity
7 th	Inflation
8 th	Involuntary migration
9 th	Economic downturn
10 th	Pollution
	97

10 years	
1st	Extreme weather events
2 nd	Critical change to Earth systems
3 rd	Biodiversity loss and ecosystem collapse
4 th	Natural resource shortages
5 th	Misinformation and disinformation
6 th	Adverse outcomes of Al technologies
7 th	Involuntary migration
8 th	Cyber insecurity
9 th	Societal polarization
10 th	Pollution

10 years

Source

World Economic Forum Global Risks Perception Survey 2023-2024.

The present leading paradigm: green growth

Technological, behavioural, etc pathways to reduce carbon are possible without reducing prosperity, through focusing **not to** reduce GDP but carbon that goes into energy (EV-s, etc), and the energy needed for GDP can also be reduced, thus GDP reduction is not needed, but new jobs can be created

Little more growth (more income) is good, helps to solve climate change – this is needed for renewable energy, turning cars etc into green. For this more investments, government interventions are needed which can not be done if the whole pie is shrinking. It is an observation that in economically difficult times people's interest in environment is decreasing – some growth is needed to make it easier to solve climate problems.

The only way out from the polycrisis: degrowth?

Green growth is an illusion, we can not solve the problems of climate change without degrowth.

Degrowth aims for a planned and democratic reduction of less necessary production in rich countries in a safe and just way. This means less requirements for lower income countries, which still have to increase production to achieve core human development aims. This definition does not include GDP.

Abandon growth as an objective and focus instead on equity, sufficiency and human wellbeing. It is not aggregate production what matters but what we are producing, assuring that people have access to goods they require and that incomes are more equally distributed.

Degrowth suggestions: decommodify public services to make them accessible to everyone: health, housing education, food, ... Job guarantee, living wages, improve barganing power of labour. Socially necessary sectors have to be improved and not necessary ones to be removed. Right to repair, extend products life.

Can degrowth be achieved within global capitalism?

Can degrowth be achieved with **souvereign capital countries**? If taxes increase, rich people leave to tax heavens, investors will leave countries with leftist policies...

New thinking is needed, the World Bank and the IMF are very much concentrating on GDP growth.

International collaboration is needed, such as the fossil fuel non proliferation treaty. Rich countries have to lead on that. Capital flight can be controlled by capital control. Countries can issue currency which allows them to mobilise production capacity towards democratically decided goals, limiting the influence of capital over the national economy.

Conclusion

The short and relatively moderate COVID shock illustrates nicely, how innovative public policies flamed up, just to evaporate when the time of immediate crisis was over.

To handle the present polycrisis or even the start of the "end of development" would need much deeper and durable innovations, turning many public policies upside down, replacing the growth motive of urban development with totally different ideas, strengthening sustainability and resilience and reverse inequalities.

This would need fundamental changes also in the way how we think about urban and housing development.

It is **very unlikely** that such systematic changes will happen in time on European scale.

Thanks for your attention!



Ivan Tosics
tosics@mri.hu
https://tosics.eu/