



Federal Institute for
Research on Building,
Urban Affairs and
Spatial Development

within the Federal Office for
Building and Regional Planning



NO NET LAND TAKE – THE GERMAN PERSPECTIVE

PBL RUIMTEDIALOOG 2023

09.11.2023

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AGENDA

- 1. The political objective of „no net land take“**
 - Short historical outline
 - Related political objectives
- 2. Current challenges of urban land take**
 - Current political discussion
 - Land use scenarios for Germany
- 3. Outlook - What would have to be done?**

THE POLITICAL OBJECTIVE OF „NO NET LAND TAKE“ - SHORT HISTORICAL OUTLINE

1997/1998

- Enquete Commission "Protection of people and the environment"
- Necessity of limiting the use of new land worked out

2004

- German Council for Sustainable Development: Guideline "More Value for Land"

2007-2012

- BMBF: REFINA
- Confirmation of the area target in the progress reports on sustainable development

2021

- Current federal government confirms the goal in the coalition agreement

25 years of political awareness, research and development of concepts

2002

- National sustainability strategy adopted by federal cabinet (21 indicators)
- One target: reduce land take to 30 ha per day by 2020
- Formed the German contribution to the Rio follow-up conference in Johannesburg

2007

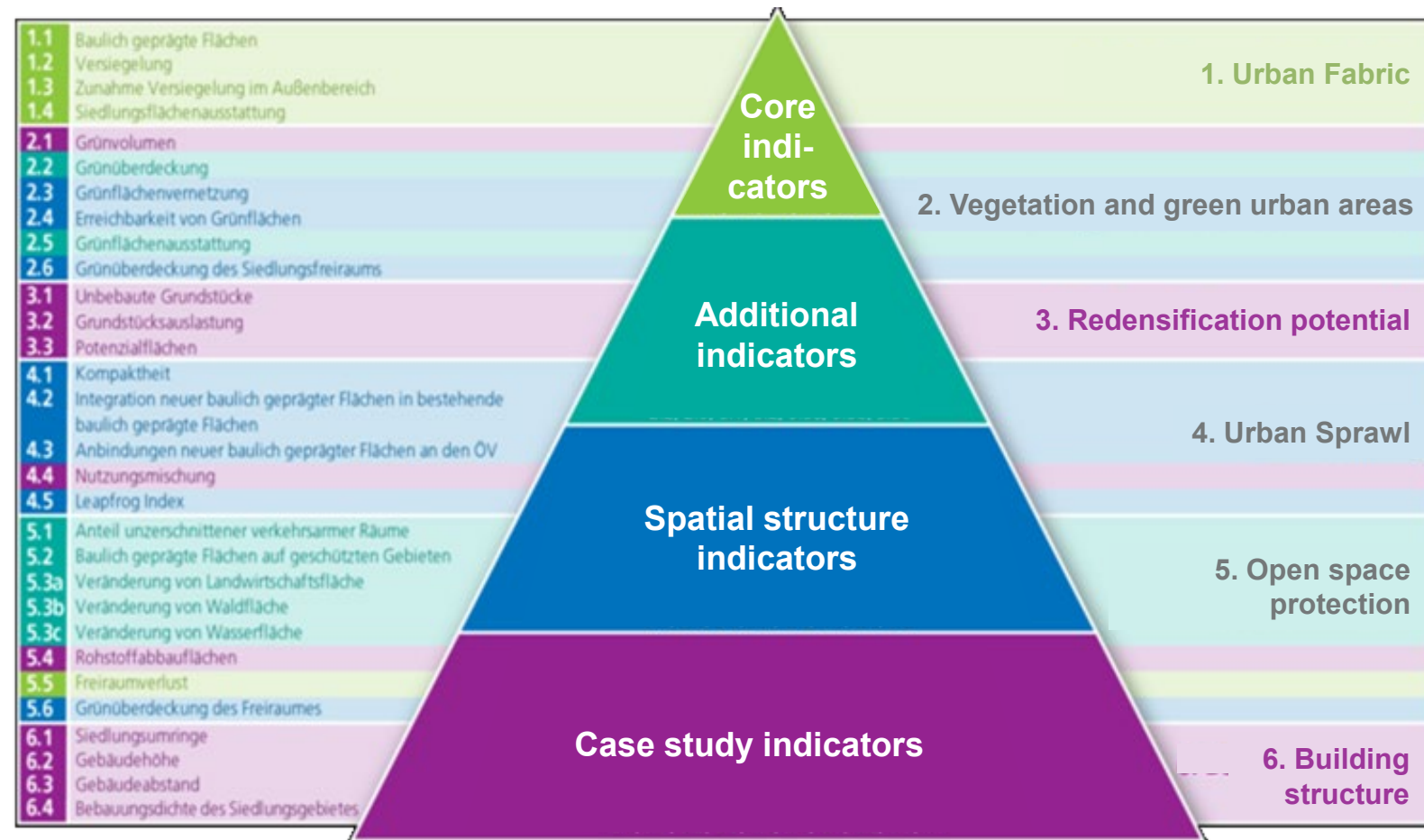
- Quality objective: Steer land take toward the reuse of land, redensification and other measures for internal development through an overall ratio of internal development to external development of 3:1.

2016

- Adjustment of target by federal government: 30 ha by 2030

THE POLITICAL OBJECTIVE OF „NO NET LAND TAKE“ – RELATED POLITICAL OBJECTIVES

- In addition to the actual land use, however, the consideration of other indicators is relevant and currently under discussion for the Revision of the SDG indicators:
 - Stop decreasing settlement density
 - Reduce loss of open space
 - Reduce urban sprawl
- INCORA Project developed a set of indicators to describe the quality of land take

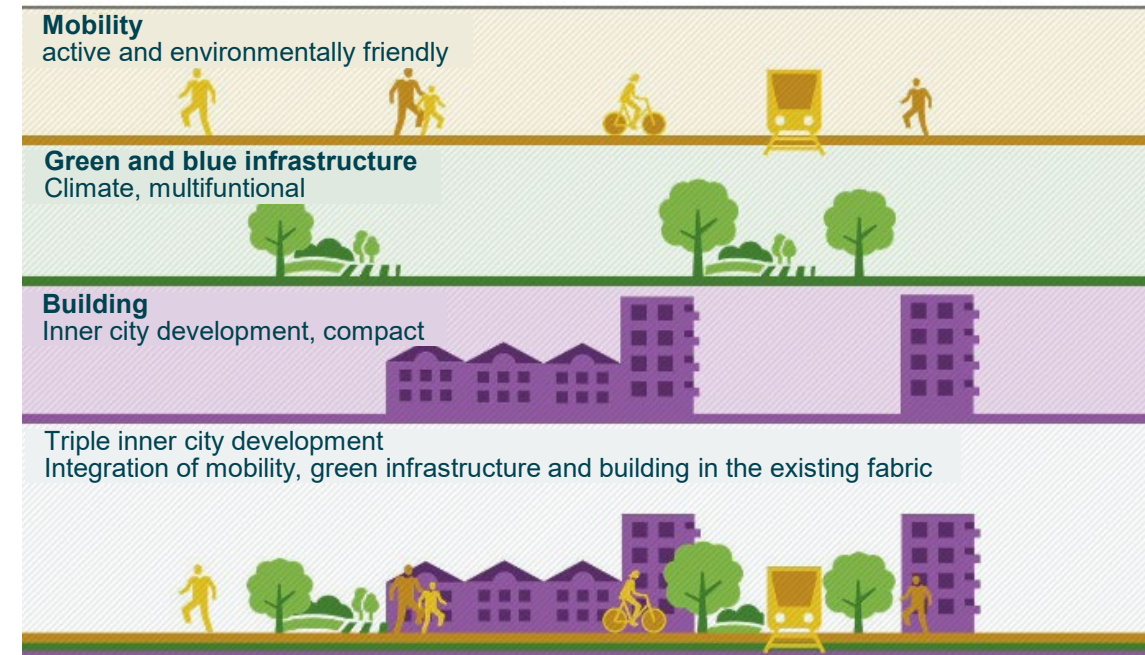


Source: Eichfuss et al. 2021 (<https://doi.org/10.26084/13dfns-p017>)

DO WE NEED NEW OBJECTIVES?

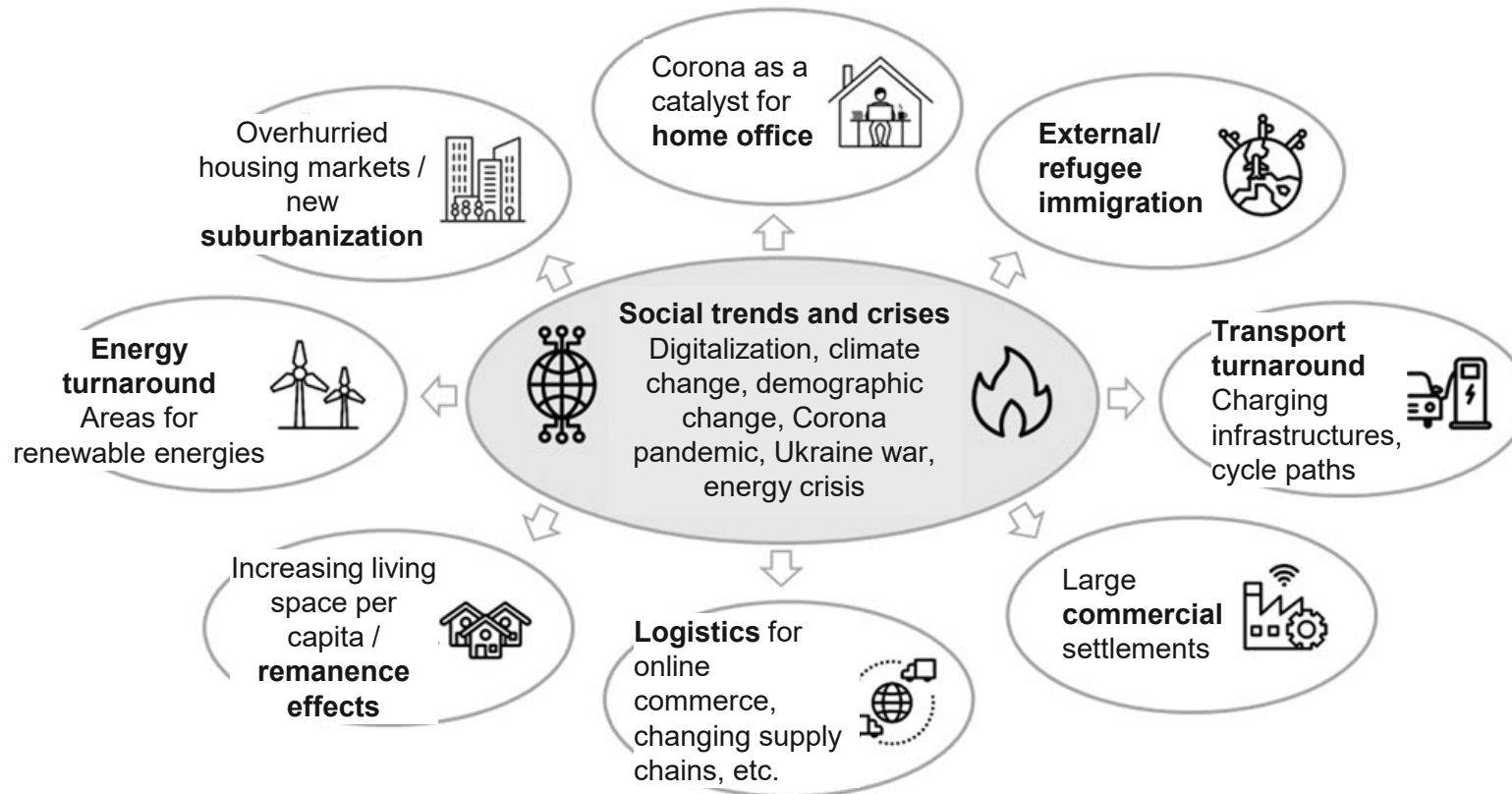
- New discussion in Germany about new/other objectives and indicators to measure land take and open space protection
 - triple inner city development
 - re-use of brownfield sites, closure of gaps between buildings and redensification
 - maintaining, expanding and preserving open spaces as well as to enhance the network and quality of open spaces
 - reuse / redistribute traffic areas
 - Complete open space protection
 - Are free-field photovoltaics settlement and transport area or not?
 - Is the 30-ha objective achievable with expansion of free-field photovoltaics?

→ **Outcome unclear!**



Source: Karl Eckert, UBA 2023

WHAT IS THE REAL PROBLEM?



Electric car charging station: created by IconTrack; Factory: created by Philipp Petzke; Auswanderung: Created by Surang; HomeOffice: created by Malo Qi; Logistik: created by dGora; Village: created by Komkrit Nooknongplut; Town: created by Made by Made; Wind turbines: created by Livon

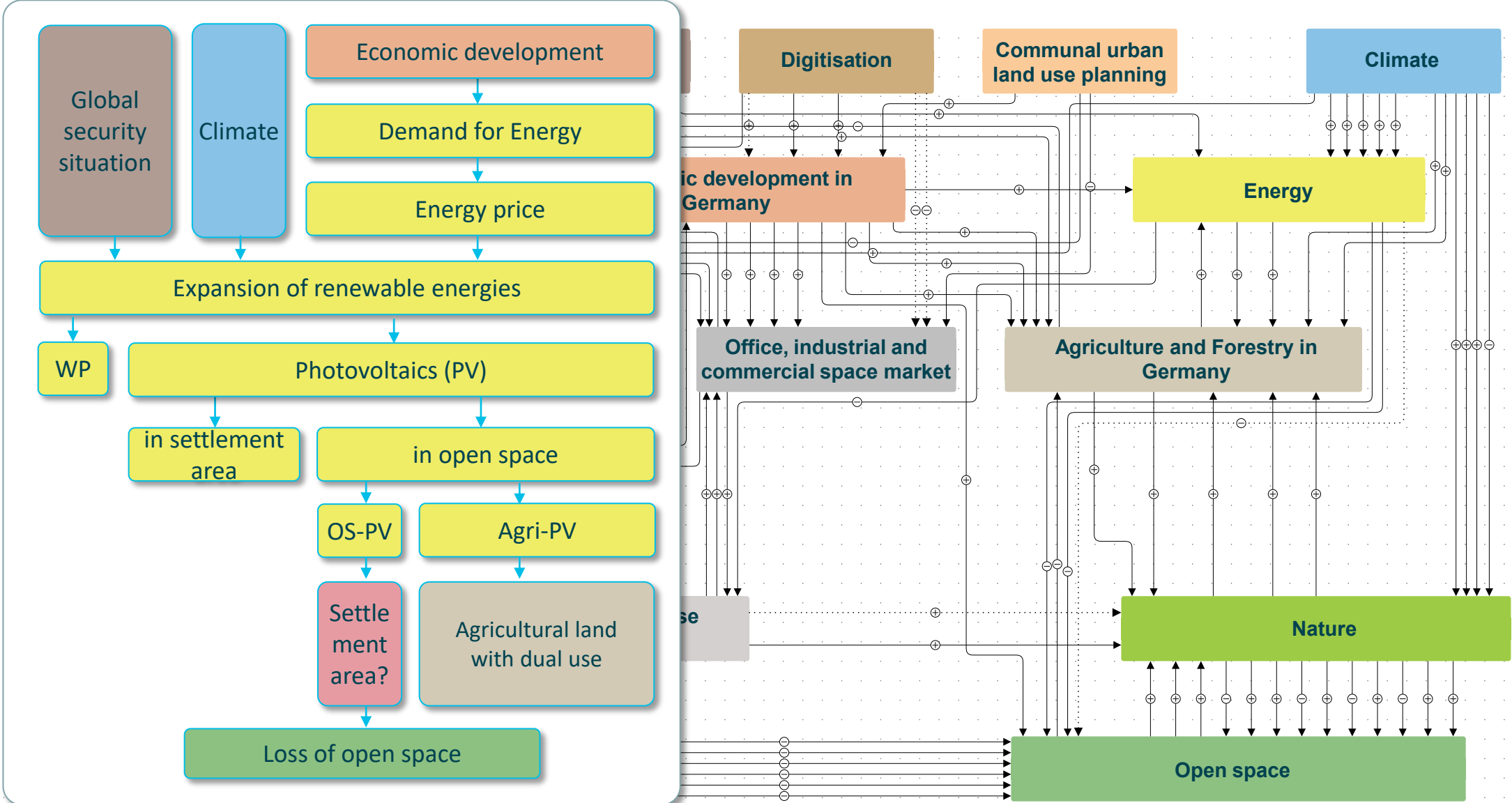
Source: ILS-Research on behalf of BBSR 2022

→ **Megatrends with potential conflicts: climate change, demographic change, energy crisis, immigration**

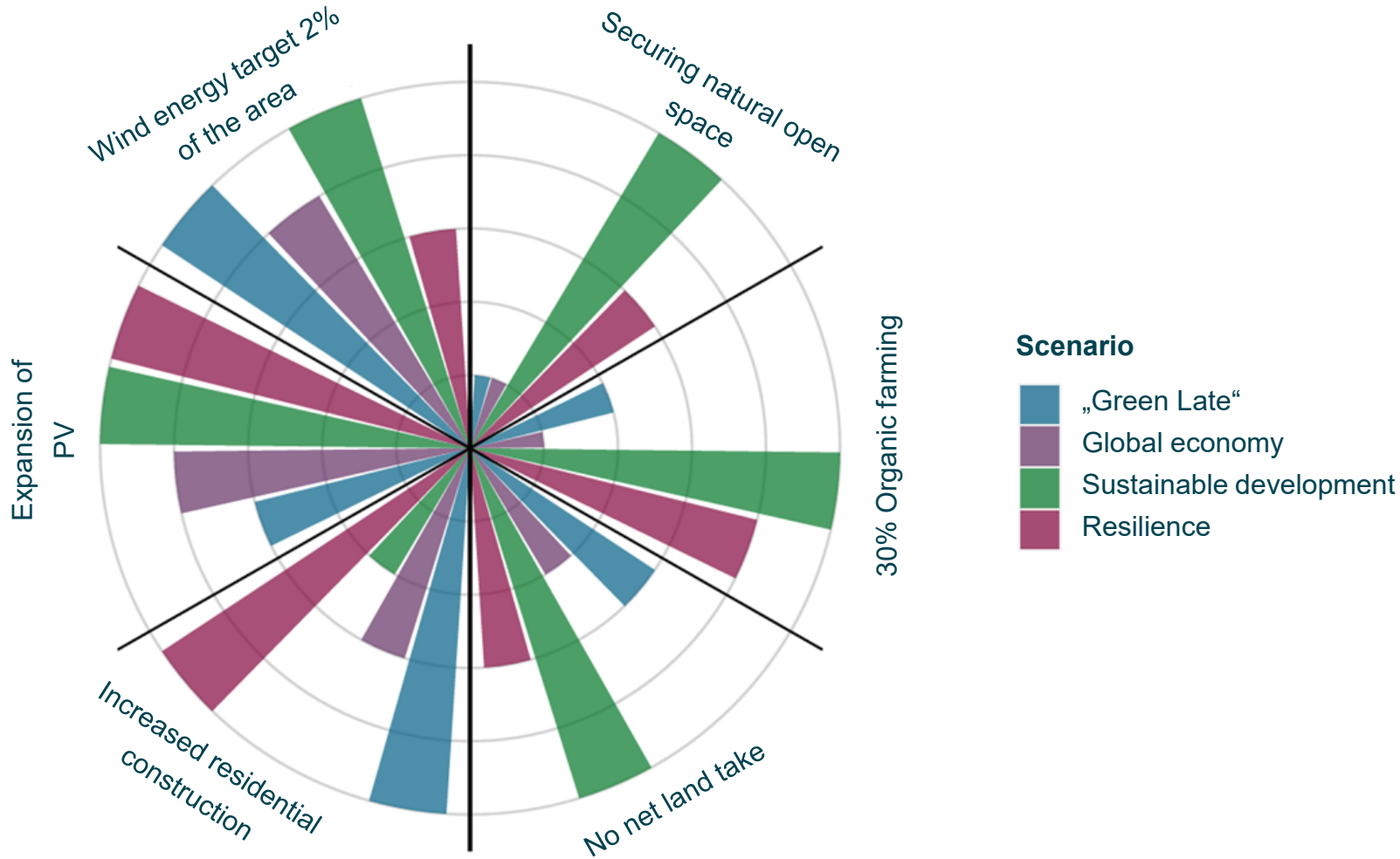
LAND USE SCENARIOS FOR GERMANY – OPEN SPACE AREAS 2030

- New research project at BBSR on behalf of UBA (March 2023 – February 2026)
- Objective is to quantify loss of open space until 2030/2050 in Germany taking into account the numerous competing land claims
- We first captured the mechanisms/drivers for the different types of open space loss. This has become quite complex

LAND USE SCENARIOS FOR GERMANY – DRIVERS OF CHANGE (SUMMARY)

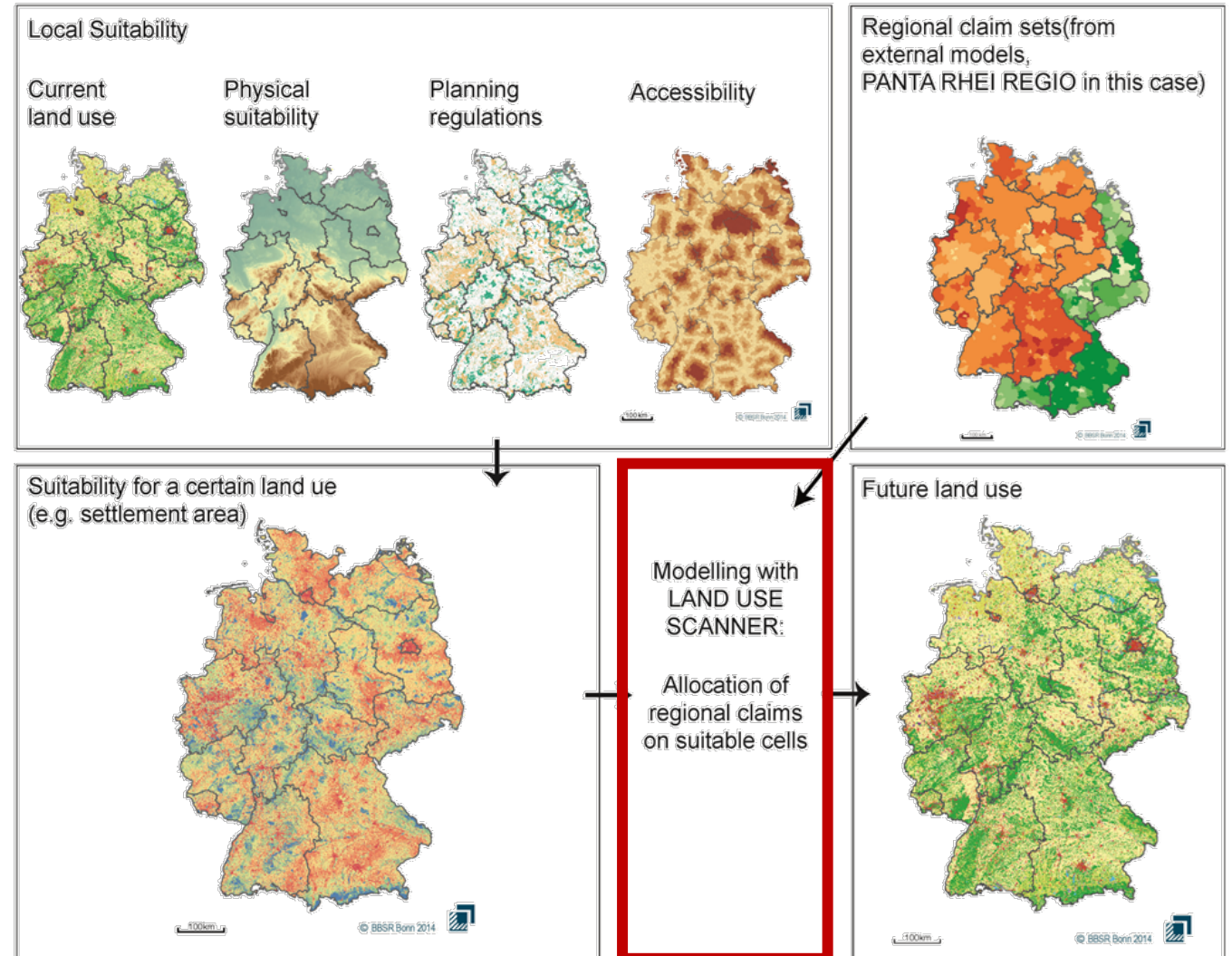


LAND USE SCENARIOS FOR GERMANY – SCENARIO DEVELOPMENT



LAND USE SCENARIOS FOR GERMANY – APPROACH – LAND USE SCANNER

- Distinction of open space:
 - Agricultural area/ natural land without dual use
 - with dual use PV and
 - with dual use WP
- First preliminary results next year



OUTLOOK - WHAT WOULD HAVE TO BE DONE?

- There are effective instruments e.g.:
 - Tradable area designation certificates
 - negative planning allocation of settlement areas
- **→ We have no shortage of instruments. We have an implementation problem**

**THANK YOU VERY MUCH FOR YOUR
ATTENTION!**

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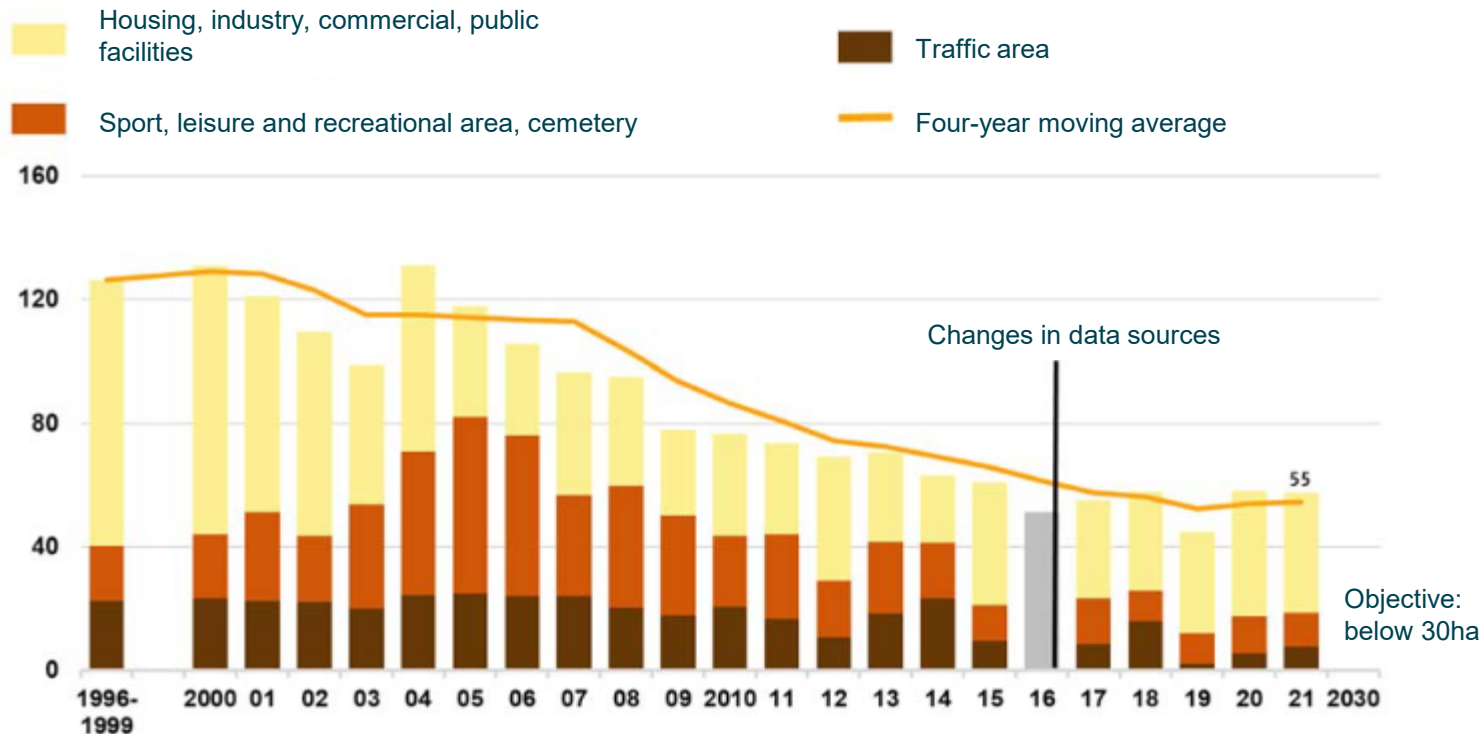
THE POLITICAL OBJECTIVE OF „NO NET LAND TAKE“ – CONCEPT OF CIRCULAR FLOW LAND USE MANAGEMENT



Source: 2008, German Institute of Urban Affairs (difu)

CURRENT DEVELOPMENT OF URBAN LAND TAKE – IN THE LONG RUN

Increase in Urban area in ha/day

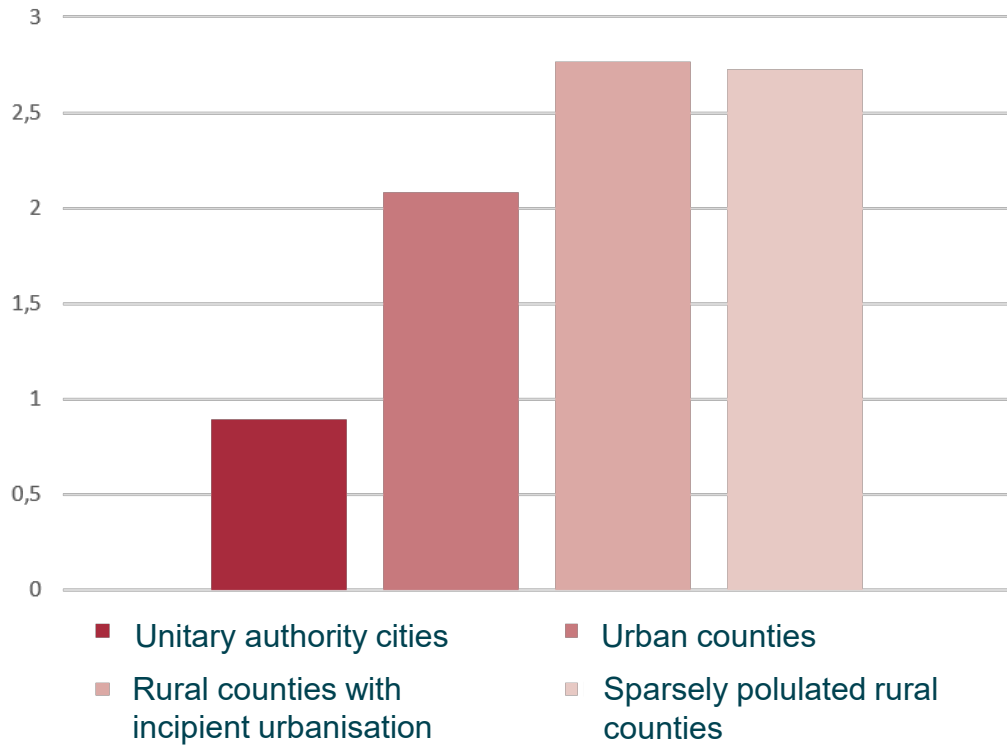


→ 14,5% of the country's area was settlement and transport area in 2021

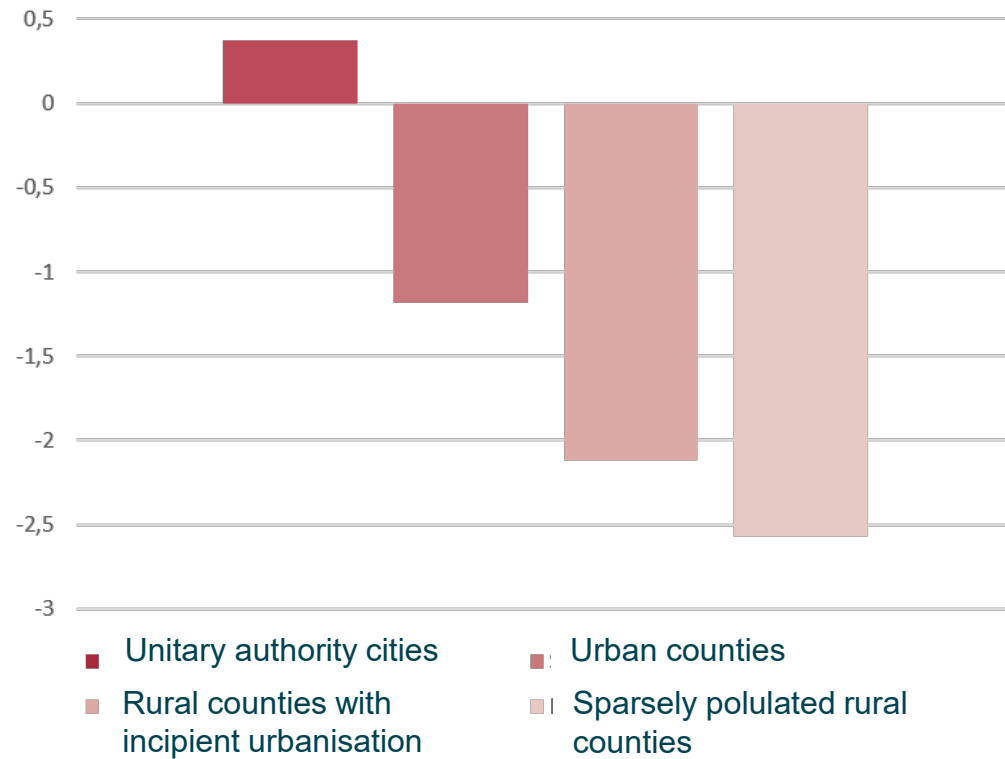
Quelle: Statistisches Bundesamt, Februar 2023

¹ Die Datenbasis für Auswertungen der Siedlungs- und Verkehrsfläche ist die amtliche Flächenerhebung. Ab dem Berichtsjahr 2016 basiert diese auf dem Amtlichen Liegenschaftskataster-Informationssystem (ALKIS). Dadurch ist der Vergleich zu den Vorjahren beeinträchtigt und die Berechnung von Veränderungen erschwert. Die nach der Umstellung ermittelte Siedlungs- und Verkehrsfläche enthält weitgehend dieselben Nutzungsarten wie zuvor. Nähere Erläuterungen zum Flächenindikator unter www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Land-Forstwirtschaft-Fischerei/einfuehrung.html

CURRENT DEVELOPMENT OF URBAN LAND TAKE – REGIONAL POLARISATION



Development of settlement and transportation area 2016 to 2021 in %



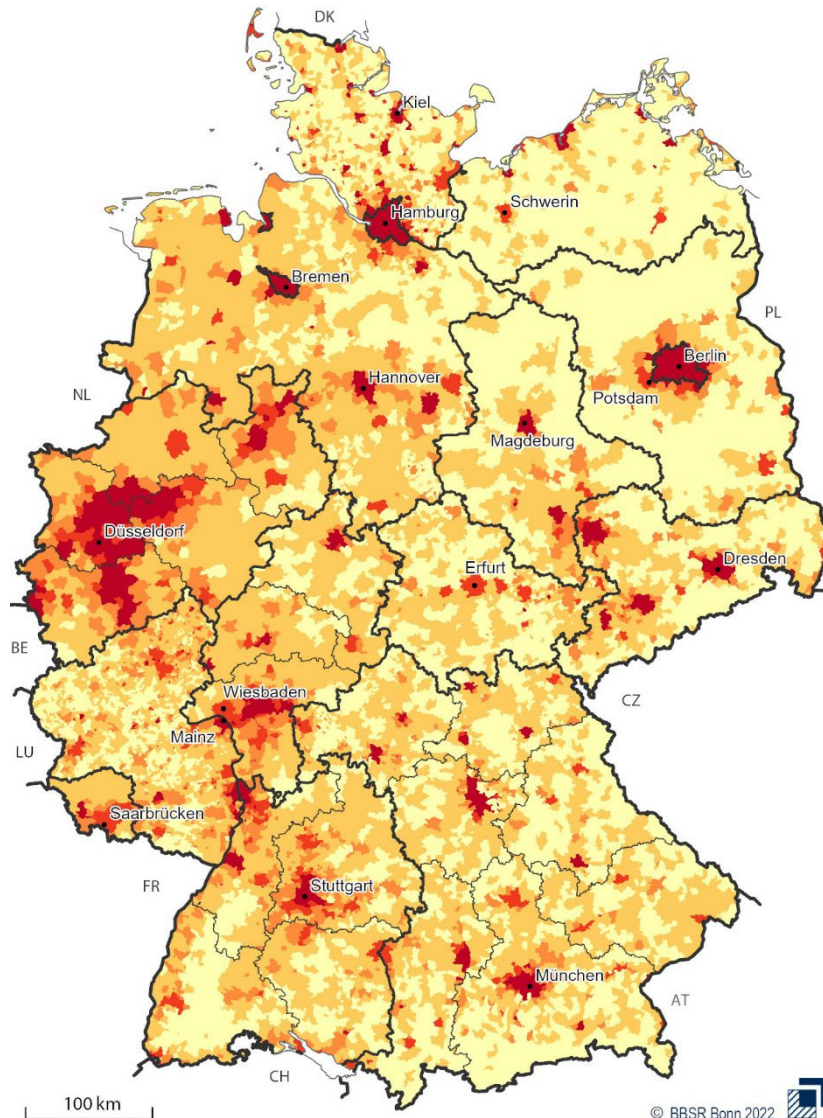
Development of the number of inhabitants per sqm of settlement and transportation area 2016 to 2021 in %

CURRENT DEVELOPMENT OF URBAN LAND TAKE – REGIONAL POLARISATION

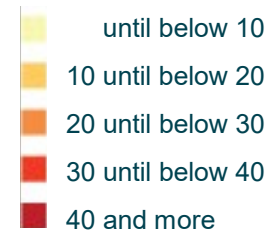
Settlement-structural county types	Settlement density 2021 in persons / skm	Difference 2021-2016	Difference 2021 – 2016 in %
Unitary authority cities	3.933	15	0,4
Urban counties	1.844	-22	-1,2
Rural counties with incipient urbanisation	1.135	-25	-2,1
Sparsely populated rural counties	871	-23	-2,6

→ 2/3 of land take takes place in rural areas, only 1/3 in urban areas

CURRENT DEVELOPMENT OF URBAN LAND TAKE – REGIONAL POLARISATION



Share of settlement and transport area in the land area in %.



Datenbasis: Laufende Raumbewertung des BBSR
Geometrische Grundlage: VG5000 (Kreise),
Stand 31.12.2021 © GeoBasis-DE/BKG
Bearbeitung: Silas Eichfuss