

Soil Walks

Soil Walks: How Numbers and Data Can Raise Awareness for Soil Protection

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umweltbundesamt[®]



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Bundesministerium
Land- und Forstwirtschaft,
Klima- und Umweltschutz,
Regionen und Wasserwirtschaft



**Why do we need to talk
about soil and planning?**

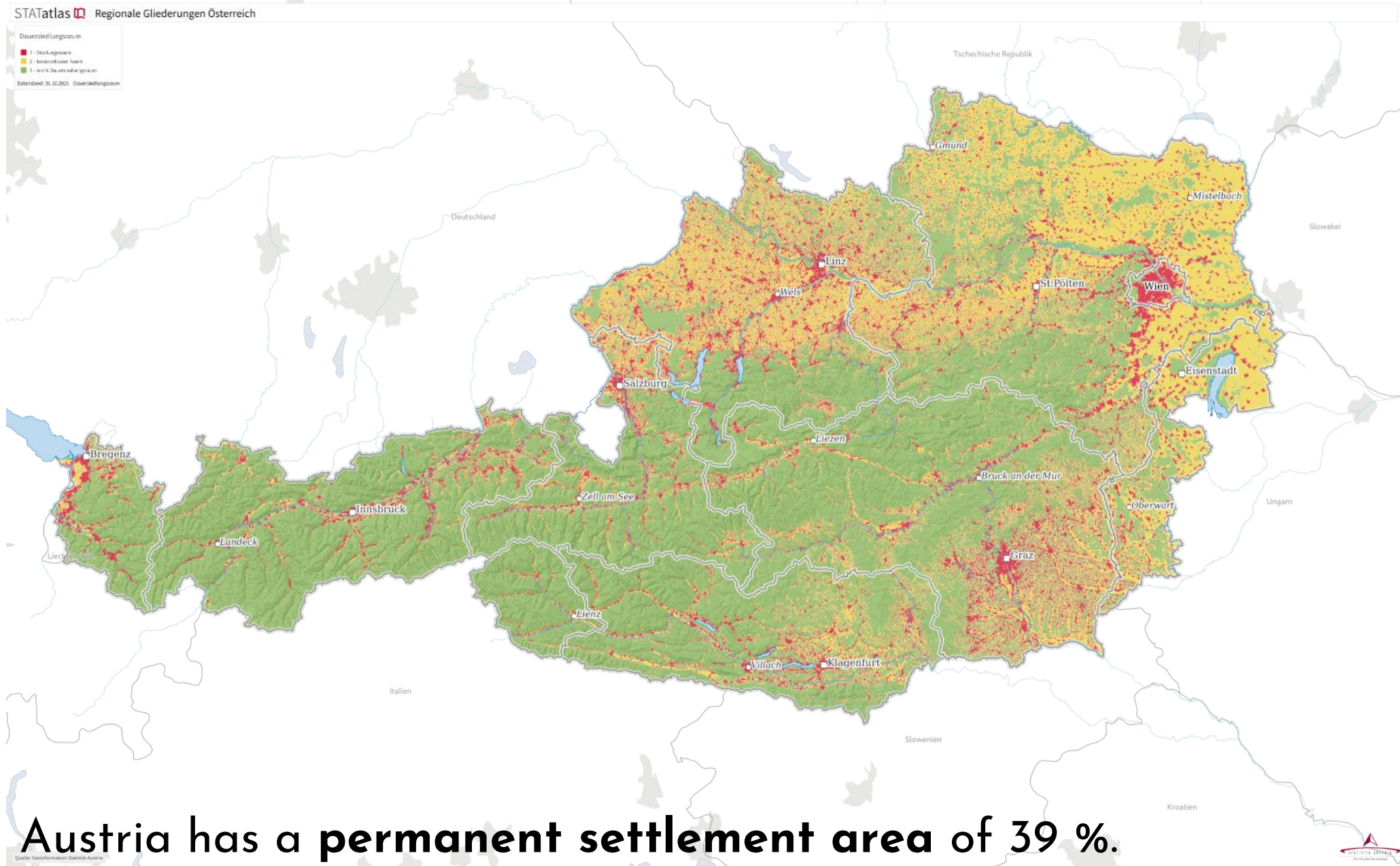
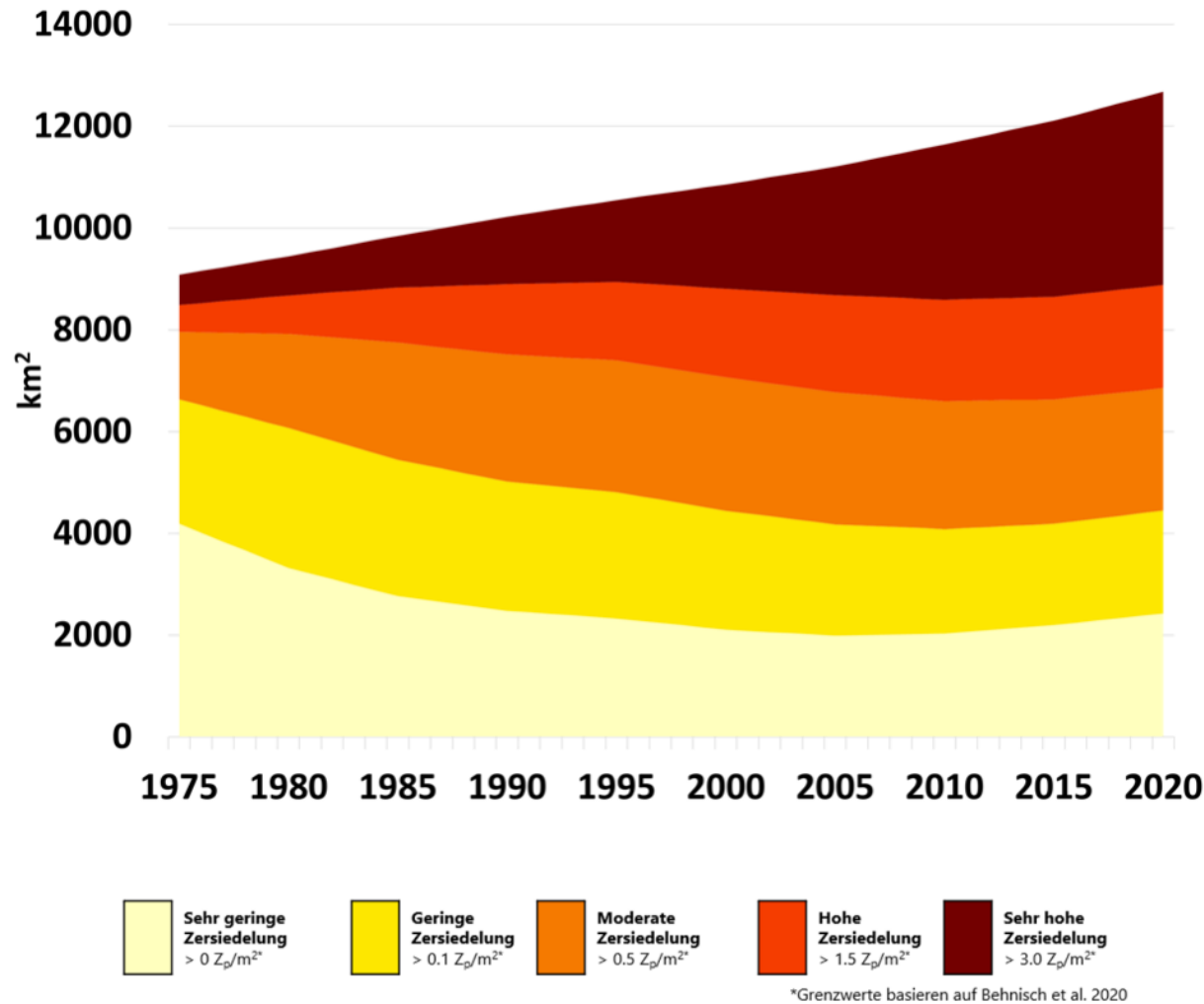


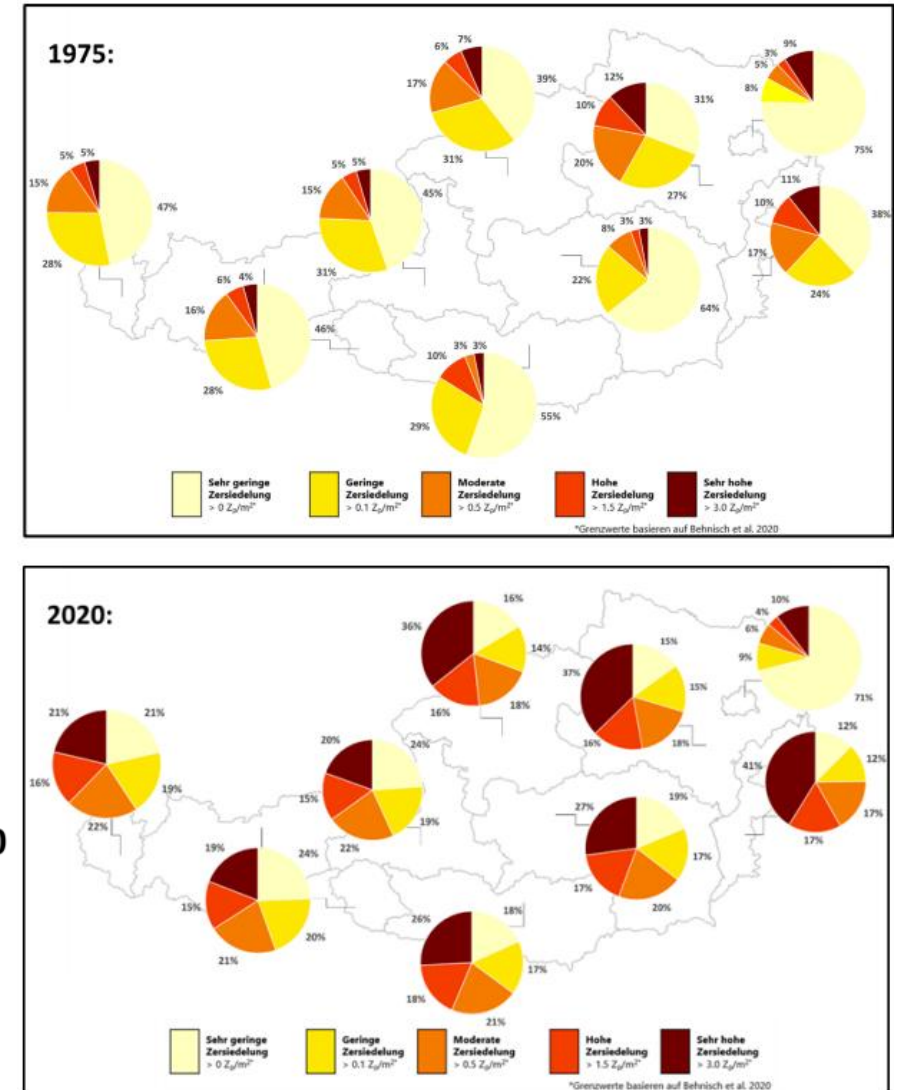


Photo: Barbara Steinbrunner

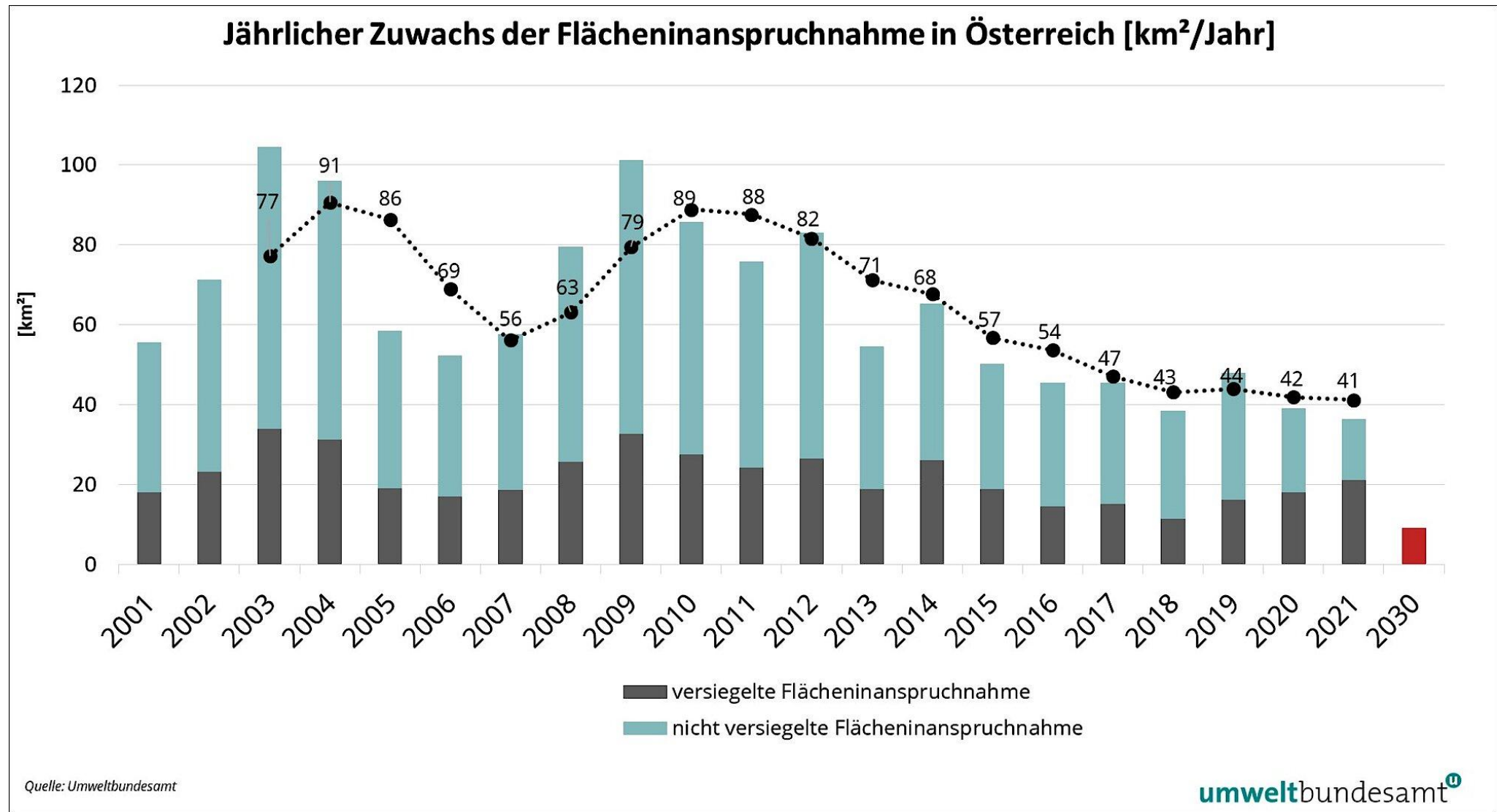
Austria shows a rapidly **increasing level of urban sprawl**.



Brenner, Krüger, Haberl, Stöglehner, Behnisch (2024): Rapider Anstieg der Zersiedelung in Österreich von 1975 bis 2020
Eine räumlich explizite Analyse unter besonderer Berücksichtigung der Wohnbevölkerung. Vienna.

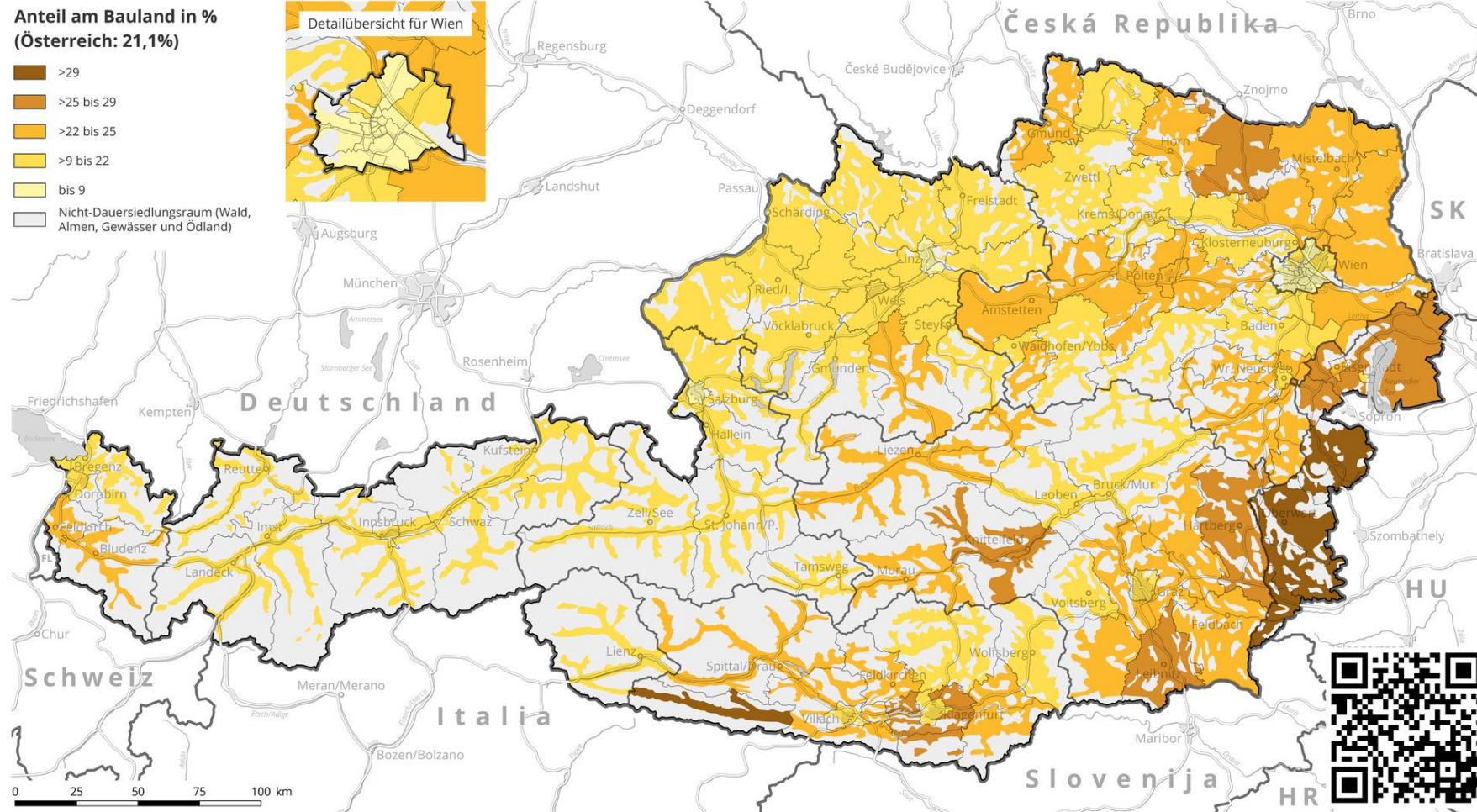


Austria shows a rapidly increasing level of urban sprawl.



11,3 hectares (2021) of land are consumed in Austria each day, one of the highest **land consumption rates** in Europe.

Anteil der Baulandreserven am Bauland insgesamt 2022



Quelle: ÖROK-Monitoring Flächeninanspruchnahme und Versiegelung (2022), Datengrundlage: Umweltbundesamt; Politische Bezirke
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ÖROKatlas
RAUMBEOBACHTUNG

22% undeveloped building land in Austria



Photo: Elias Grinzinger

Many **unused** or underused buildings



The new Land Use Strategy provides a political commitment, but it is **not currently implemented**

What is a Soil Walk?

Background/idea

- Large differences in perceptions of land use, soil sealing and land conservation through spatial planning
- Gap between spatial perception and spatial data



Plan

- Method for initiating public dialogue and preparing participatory planning processes
- Discuss current challenges and opportunities related to land use in municipalities/regions.
- Starting point for forward-looking planning measures in the municipality/region

Photo: Christoph Kleinsasser



The science of walking

- Walking as a method of knowledge creation
- Planning as a communicative task (Healey 1992)
- Planning as a task of understanding and communication (Keller 1996)
- Lucius Burckhardt: „Strollology“ - the perception of the effect of the environment while walking
- Informative/discursive/exploratory/intervening walk (Kirchberger 2017)

Project results

- (1) **Training video and instructions** for the self-organised implementation of Soil Walks by local planners, municipal administrators, environmental and soil officers, vacancy managers, teachers and many more.
- (2) **Data dashboard** to visualise key land use and soil sealing indicators in Austria's municipalities and regions (contains the new land monitoring data)



Main themes of the test walks



Waidhofen/Thaya

- Functioning town centre
- Opportunities for internal development
- Potential of vacancies in the town centre

Mautern in Steiermark

- Building land mobilisation
- Strengthening the centre
- Opportunities for densification

Langau

- Soil functions and soil protection
- Settlement typologies
- Climate change adaptation measures

Altmünster

- Climate change adaptation measures
- Preserving green areas.
- Strengthening the centres and promoting inner-city development

Soil Walks



Soil Walks



Soil Walks



Österreich im Überblick

Flächeninanspruchnahme

Versiegelung

Wertvolle Böden (BEAT)

Räumliche Verteilung



8.387.920 ha

Gesamtfläche

564.795 ha

Flächeninanspruchnahme

629 m²

Flächeninanspruchnahme / EW

296.380 ha

versiegelte Fläche

330 m²

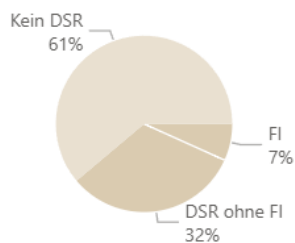
versiegelte Fläche / EW

8.978.929

Einwohner:innen 2022

Dauersiedlungsraum (DSR)

DSR Kein DSR



318.238 ha

gewidmetes Bauland

Baulandreserve

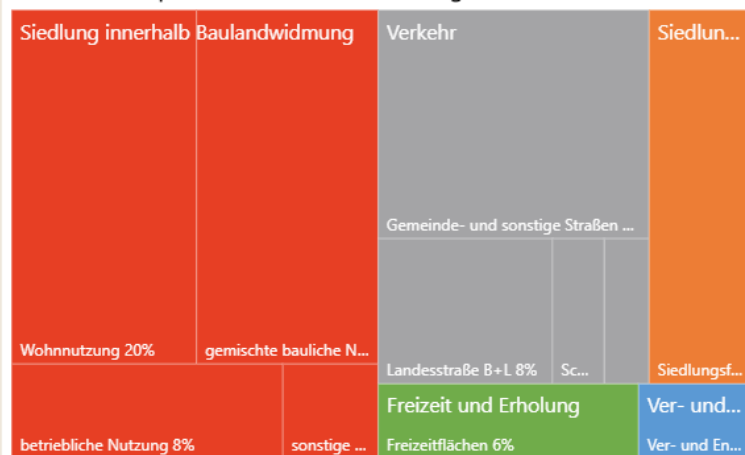
bebautes Bauland unbebautes ...



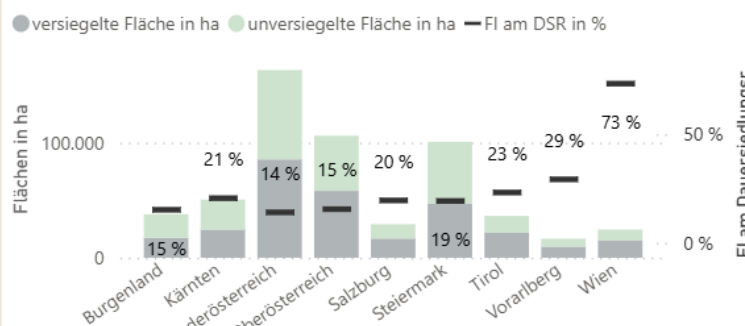
Soil Walks



Flächeninanspruchnahme (FI) nach Kategorie



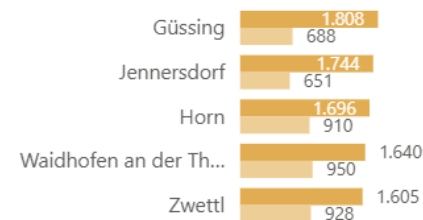
Anteil der Versiegelung an der Flächeninanspruchnahme (FI)



Flächeninanspruchnahme / Einwohner:in anzeigen

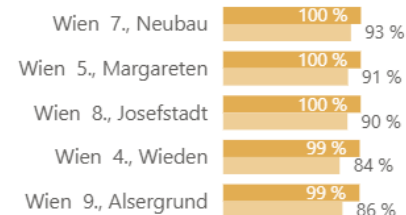
Flächeninanspruchnahme (FI) / Einwohner:in nach Bezirk

FI / EW in m² versiegelte Fläche / EW in m²



Flächeninanspruchnahme (FI) am Dauersiedlungsraum (DSR) nach Bezirk

FI am DSR versiegelte Fläche am DSR



Bundesland durch Klicken auf den jeweiligen Balken im Diagramm auswählen.

Datenquellen: ÖROK, Umweltbundesamt

www.soilwalks.at
dashboard.soilwalks.at

Results

- Bringing together local knowledge, policy considerations and science
- The challenges and the interests vary, but the following topics are in demand:
 - Adaptation to climate change
 - Reducing vacancy and strengthening town centres
 - Mobilisation of building land
- Land use data not well known
 - Comparison with other (structurally similar) municipalities of high interest
- The method can be used at different levels of a planning process



Photo: Christoph Kleinsasser

Soil Walks



More information at soilwalks.at

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Tip: Podcast ZUKUNFT STADT „Wie gelingt Bewusstseinsbildung zum Bodenschutz“
[#22 BODEN IM FOKUS: Wie gelingt Bewusstseinsbildung im Kontext Bodenschutz? - future.lab](#)



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