



Land Use Planning and Agriculture: Austrian Experiences and Challenges I

ECAP Prague Training Visit 2016

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Land Use Planning and Agriculture



diePresse 2008

eBod 2015

Land Use Planning and Agriculture



- Agriculture and forestry are the dominant land use types
 - 38% of Austria's total area are agriculture, 47% are forests (Austrian Statistics, 2011)
 - Differences between agriculture and forestry in terms of land use regulations: strong legal position of the Austrian Forest Act
- Agriculture influences spatial development
 - Management of cultural landscapes
 - Farmers' property rights on land

Land Use Planning

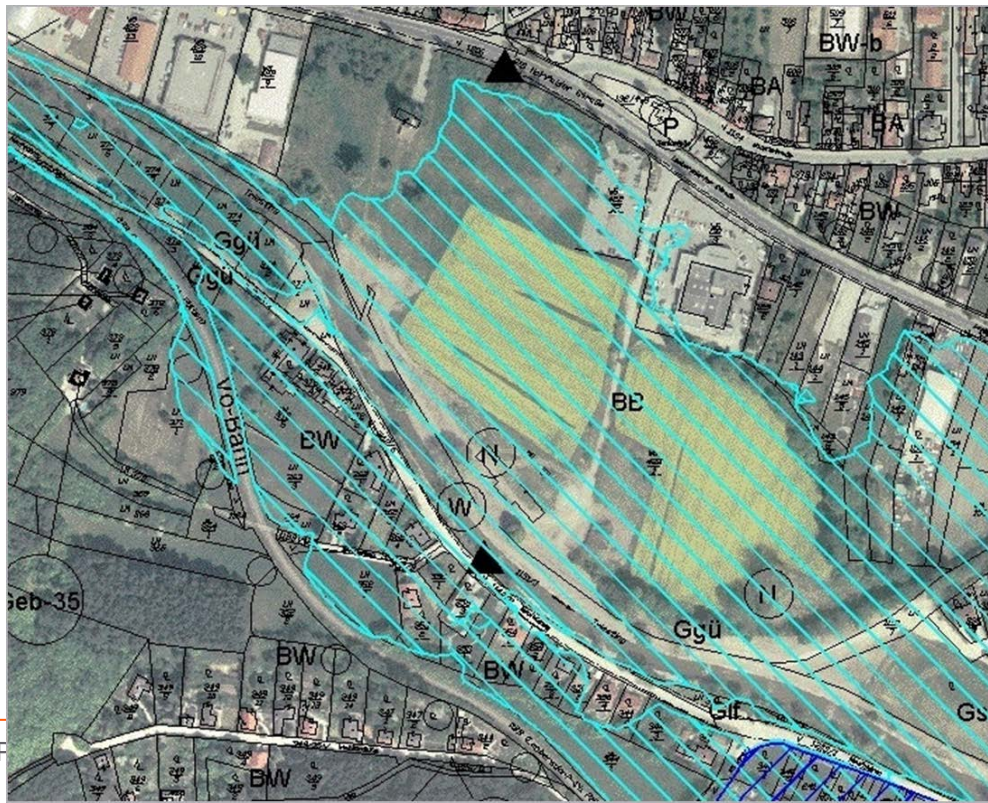


- Land use planning is a **regulatory instrument** influencing the **allocation of land uses** to designated territorial units (e.g. land parcels).
- **Allocation of land uses** refers to the question what land is used for and if this land use meets politically determined objectives.
- Two extreme positions in land use allocation: **free-market approach** vs. **central planning approach**
- In a private ownership system every interference into private property has to be justified, usually either by **public interests** or by **third-party rights**.

Land Use Planning



- **Land use planning (LUP)** includes among others **zoning** (which is usually part of spatial planning), building permit control, protection of natural resources, urban conservation, aspects of environmental protection (especially pollution control), coastal zone management.



- LUP covers a wide range:
 - **basic systems** covering only the allocation of land rights (ownership, leasehold) or approval of building construction
 - **elaborated systems** of planning based on an integrated, multi-level approach
- LUP systems vary in terms of scope, spatial extension, participation and the gap between expressed objectives and outcomes.
- They also vary in terms of **the location of power** (centralization vs. decentralization) and the **roles of public and private sector**.
- LUP systems are influenced by the **political and administrative situation** of a country and by its **jurisdiction**.

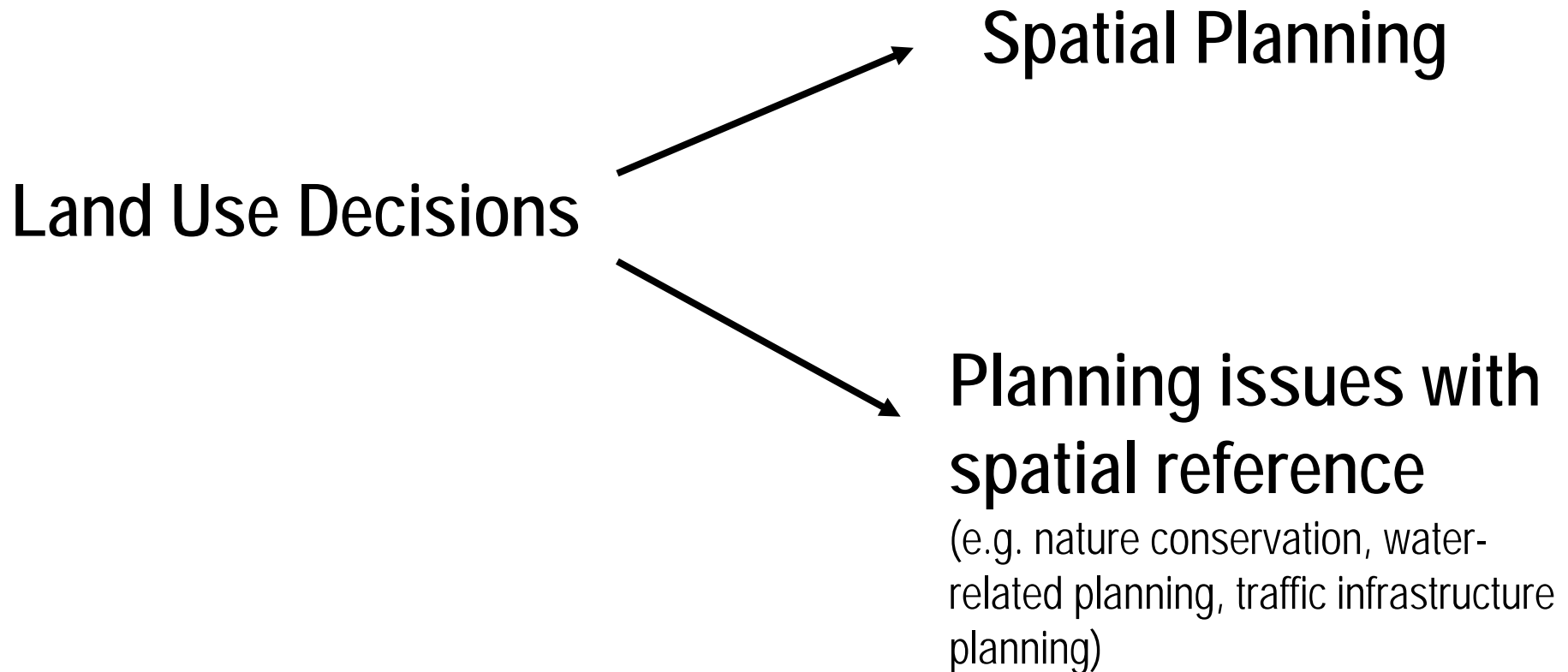
Land Use Decisions at European Union Level



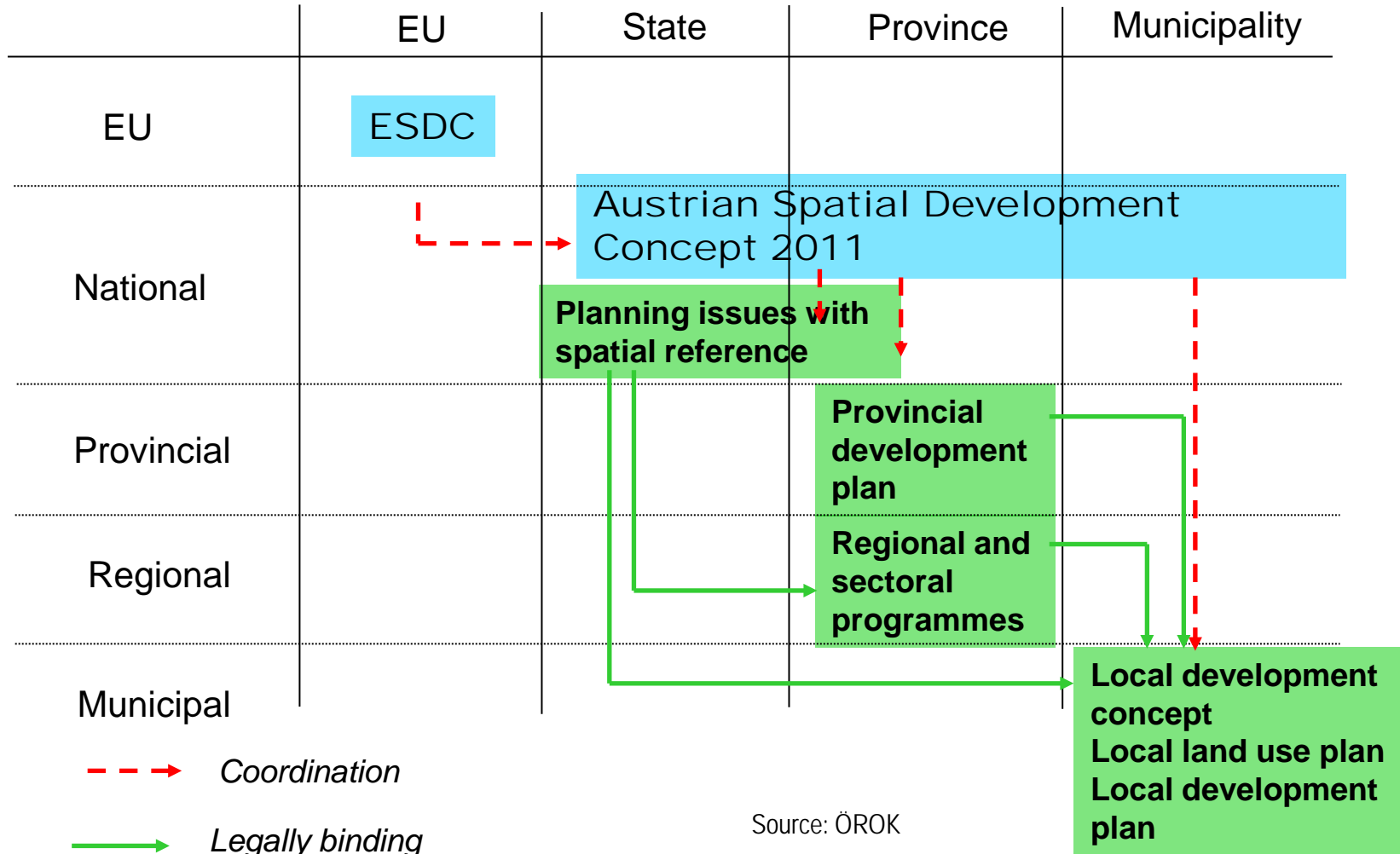
- European Spatial Development Concept (ESDC)

More importance of sectoral policy fields in land use planning:

- Common Agricultural Policy (CAP)
- Transportation policy (e.g. TEN – Trans European Networks)
- Regional policy
- Nature conservation (Nature 2000 network)
- Water management (EU Water Framework Directive, EU Flood Directive)



Land Use Planning in Austria



Spatial Planning in Austria

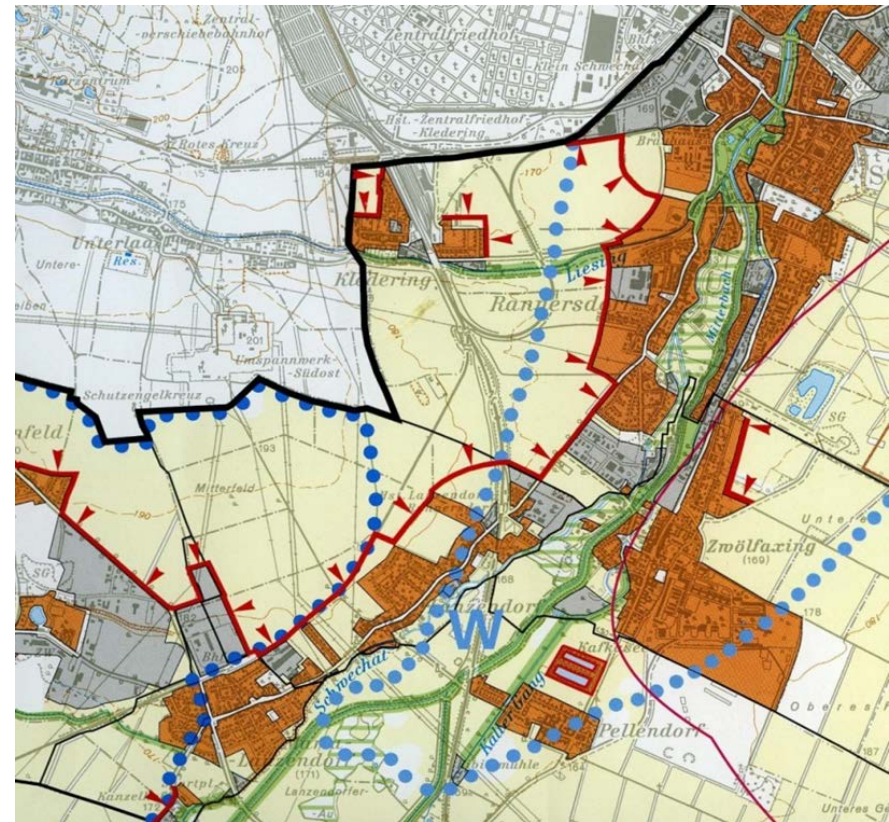


- Spatial planning in Austria follows a **comprehensive integrated approach**
- Spatial planning is conducted through a **systematic and formal hierarchy of plans**. These are organized in a control system, where plans at lower levels must not contradict planning decisions at higher levels
- Strong position of (regional and) **local governments**
- Substantial **coordination demands**

Instruments of Spatial Planning in Austria



- **Provincial level: policy making and implementation of spatial planning issues with more than local importance**
 - Provincial development plan
 - Sectoral programme
 - Regional (development) programme



Source: Provincial Government of Lower Austria

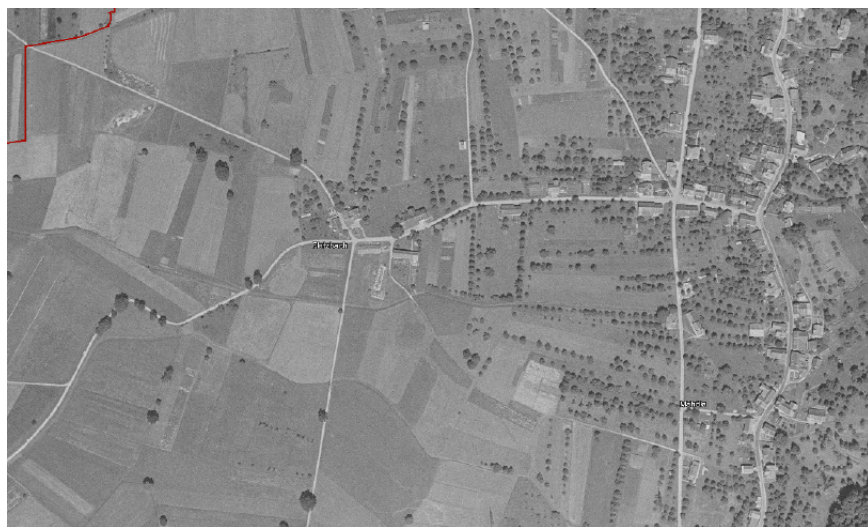
Goals of Spatial Planning in Austria



- Planning goals **define public interests** in spatial development
- Spatial planning laws include a bunch of – partly contradicting – **planning goals**, e.g.
 - ensure a land-saving development
 - provide spatial conditions for agriculture and food security
 - ensure favourable conditions for commercial and industrial development
- Spatial planning decisions require a **consideration of different planning goals** regarding environmental, economic and social aspects

The Problems

- Conversion of agricultural land to building land ('land take')
- Soil sealing
- Urban sprawl or housing sprawl (in terms of scattered (housing) development)



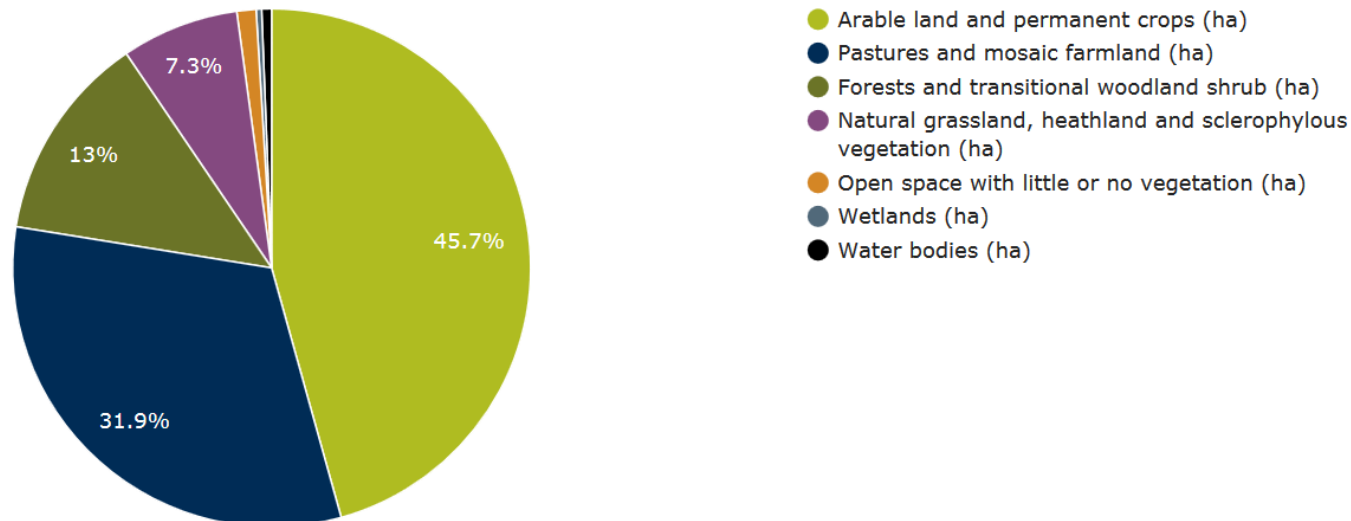
Source: Provincial Government of Vorarlberg, cited by Vetter, 2013

Land Take



Land take by the expansion of residential areas and construction sites is the main cause of the increase in the coverage of urban land at European level. **Agricultural zones** and, to a lesser extent, forests and semi-natural and natural areas, are disappearing in favor of the development of artificial surfaces.

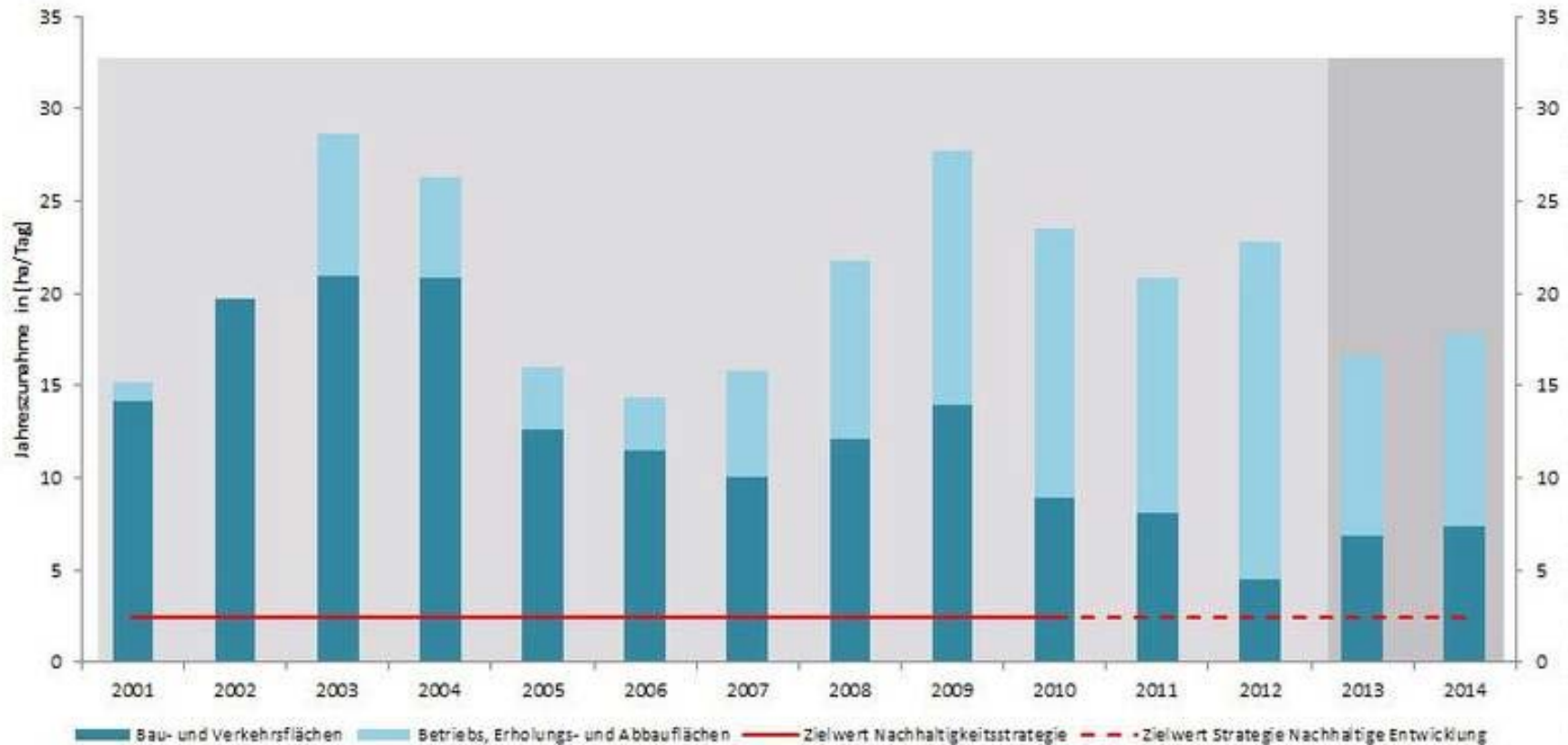
38 – Relative contribution of land-cover categories to uptake by urban and other artificial land development (2000-2006)



Indicators of Land Take



Development of land take in Austria in hectares per day



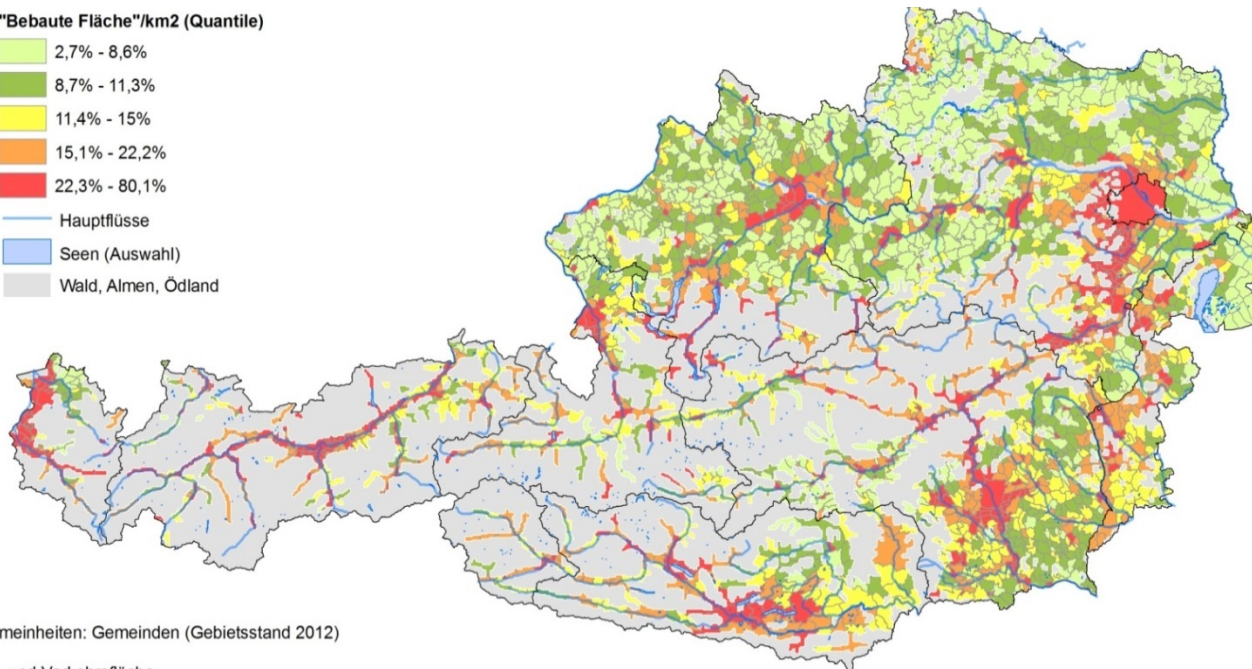
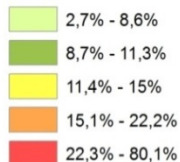
Source: Austrian Environmental Agency, 2016

Land Take for Settlement and Traffic Infrastructure (TI) 2012



Areas used for settlement and traffic infrastructure in % of the area suitable for housing with regard to municipalities

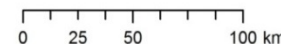
"Bebaute Fläche"/km2 (Quantile)



Raumeinheiten: Gemeinden (Gebietsstand 2012)

Bau- und Verkehrsfläche:

- Benützungstyp „Baufläche“ mit allen Nutzungen („Gebäude“, „befestigt“, „begrünt“ und „nicht näher unterschieden“);
- Benützungstyp „Sonstige“ mit den Nutzungen „Straßenanlagen“ und „Bahnanlagen“



Quelle: Regionalinformation der Grundstücksdatenbank (BEV), Stand der Daten: 1.1. 2012

Berechnungen: Umweltbundesamt

Kartengrundlagen: Statistik Austria, Arc Austria

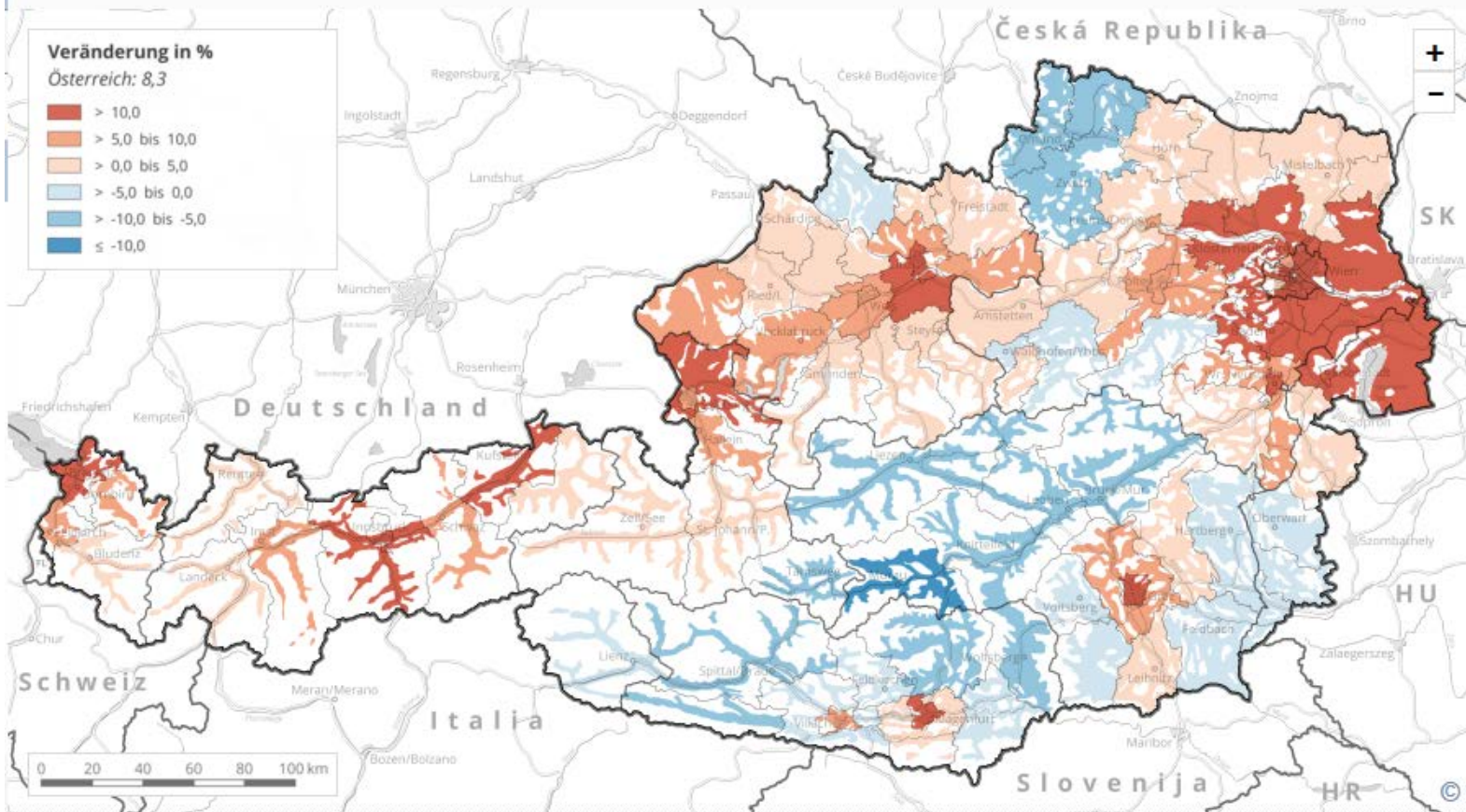
Kartenerstellung: Mag. Lukas Löschner, bakk. techn.



Population Forecast 2014 – 2030 District Level



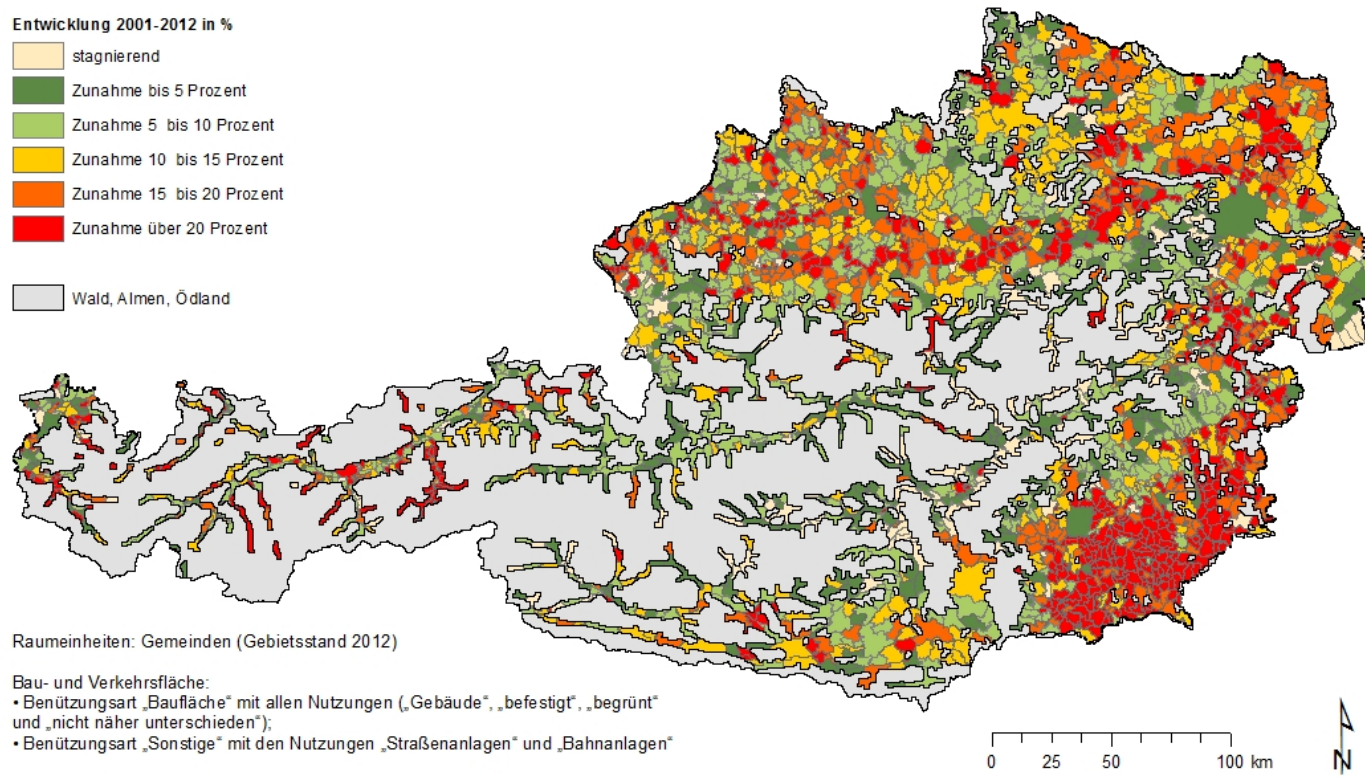
ÖROK-Prognose: Bevölkerungsveränderung 2014-2030 in Prozent - insgesamt



Source: www.oerok-atlas.at/#indicator/65, 28.10.2015

Increase of Settlement and TI Areas 2001 - 2012

Increase of areas used for settlement and traffic infrastructure in % with regard to municipalities



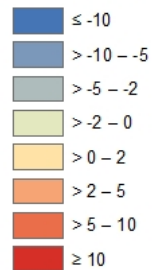
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Source: Austrian Environmental Agency, own adaptation, 2013

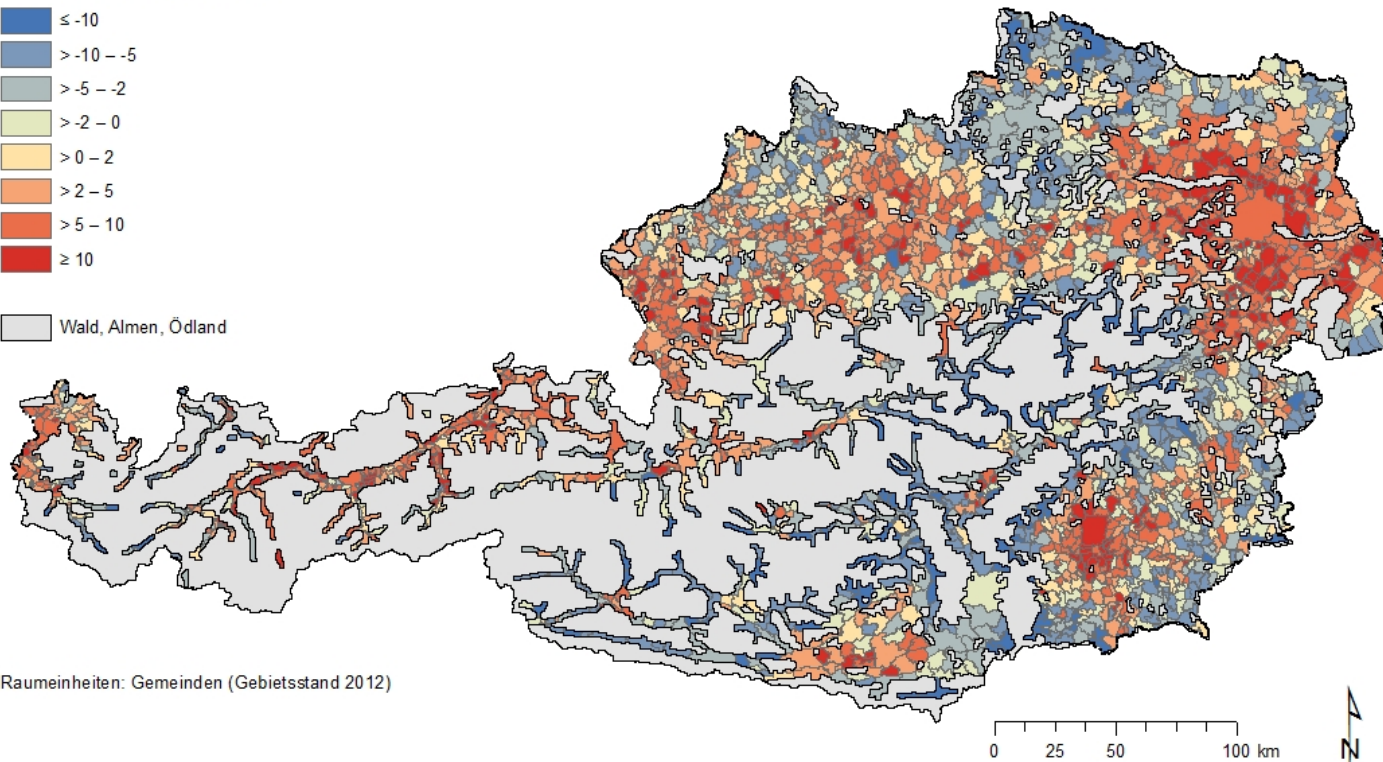
Population Development 2002 - 2012

Population development 2002 – 2012 in % with regard to municipalities

Veränderung 2002-2012 in %



Wald, Almen, Ödland



Raumeinheiten: Gemeinden (Gebietsstand 2012)

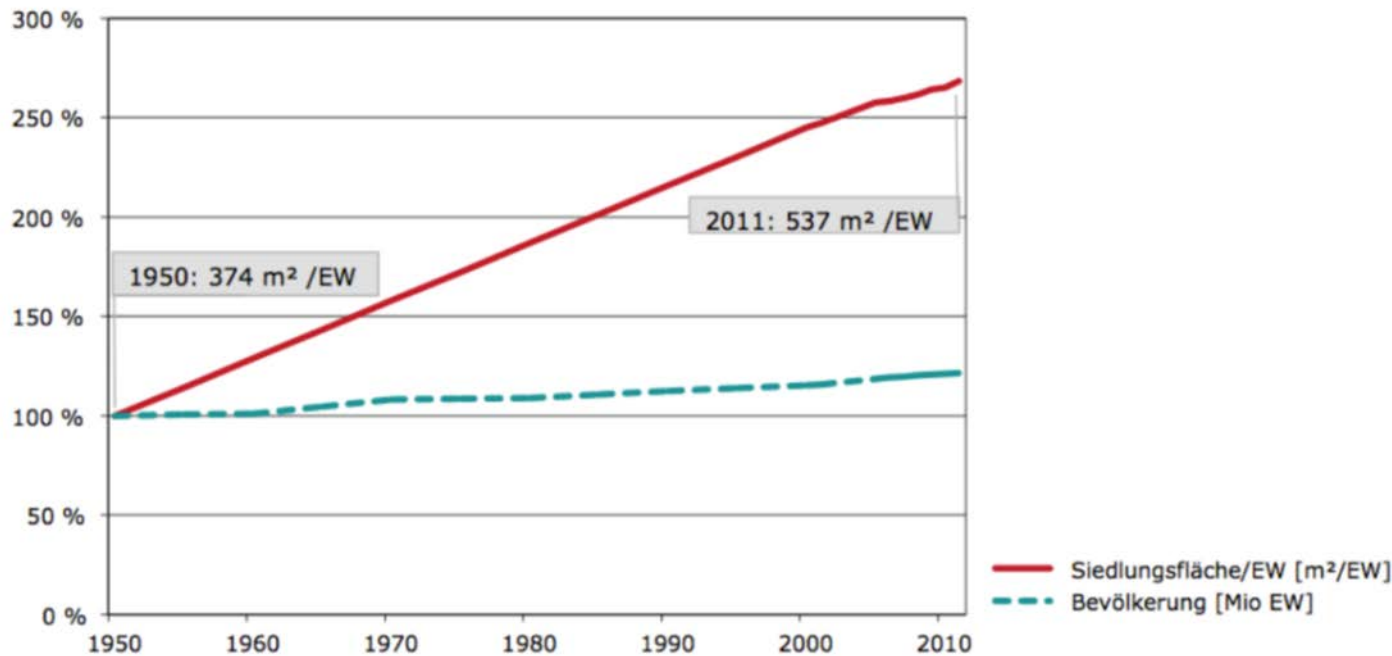
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Source: Austrian Statistics, own adaptation, 2013

Causes for an Increase in Land Take

- Increase in average living and housing area per capita

Increase in average housing area per capita and in population
(1950 = 100 %)

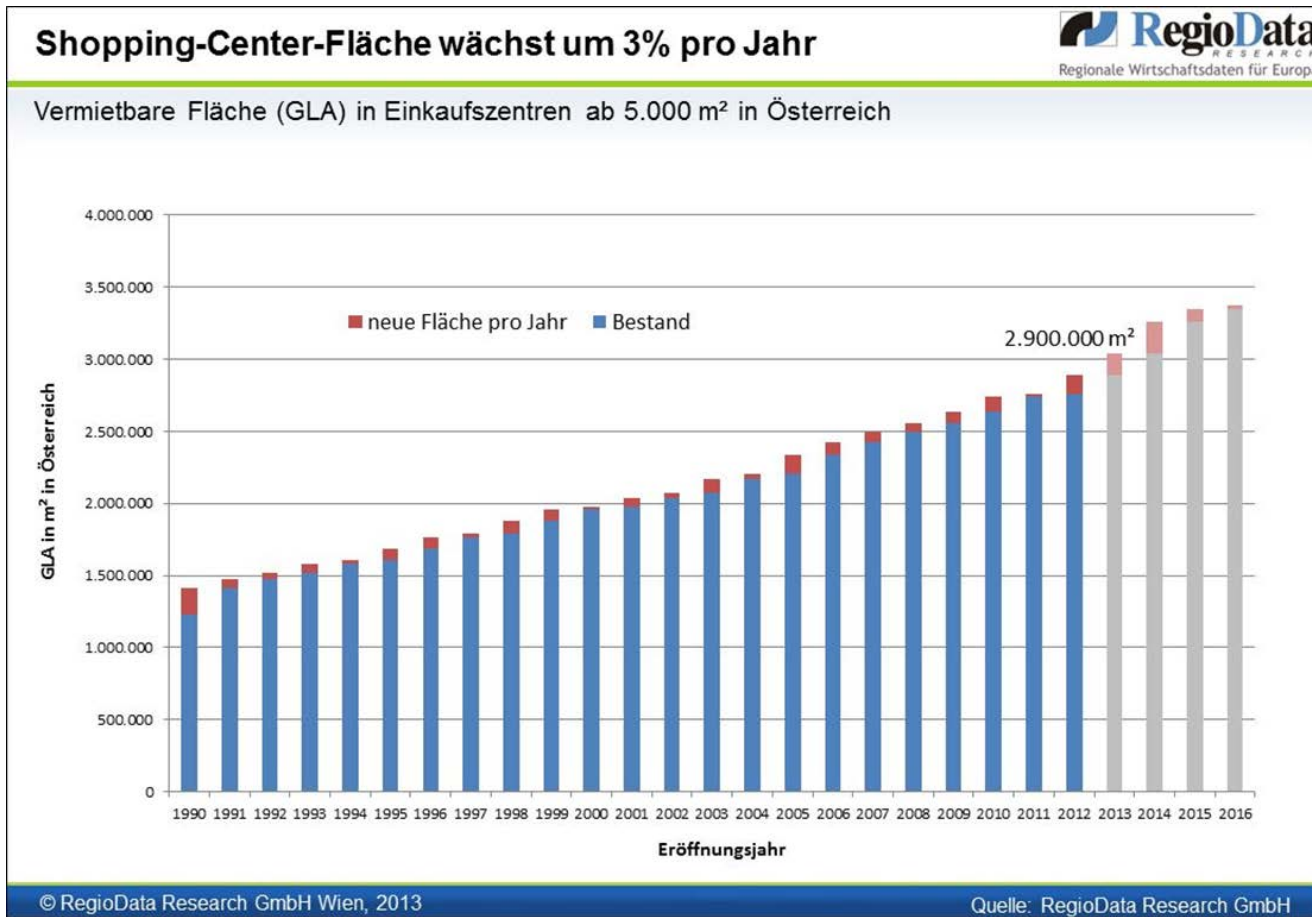


Source: Austrian Environmental Agency, Austrian Statistics, 2011

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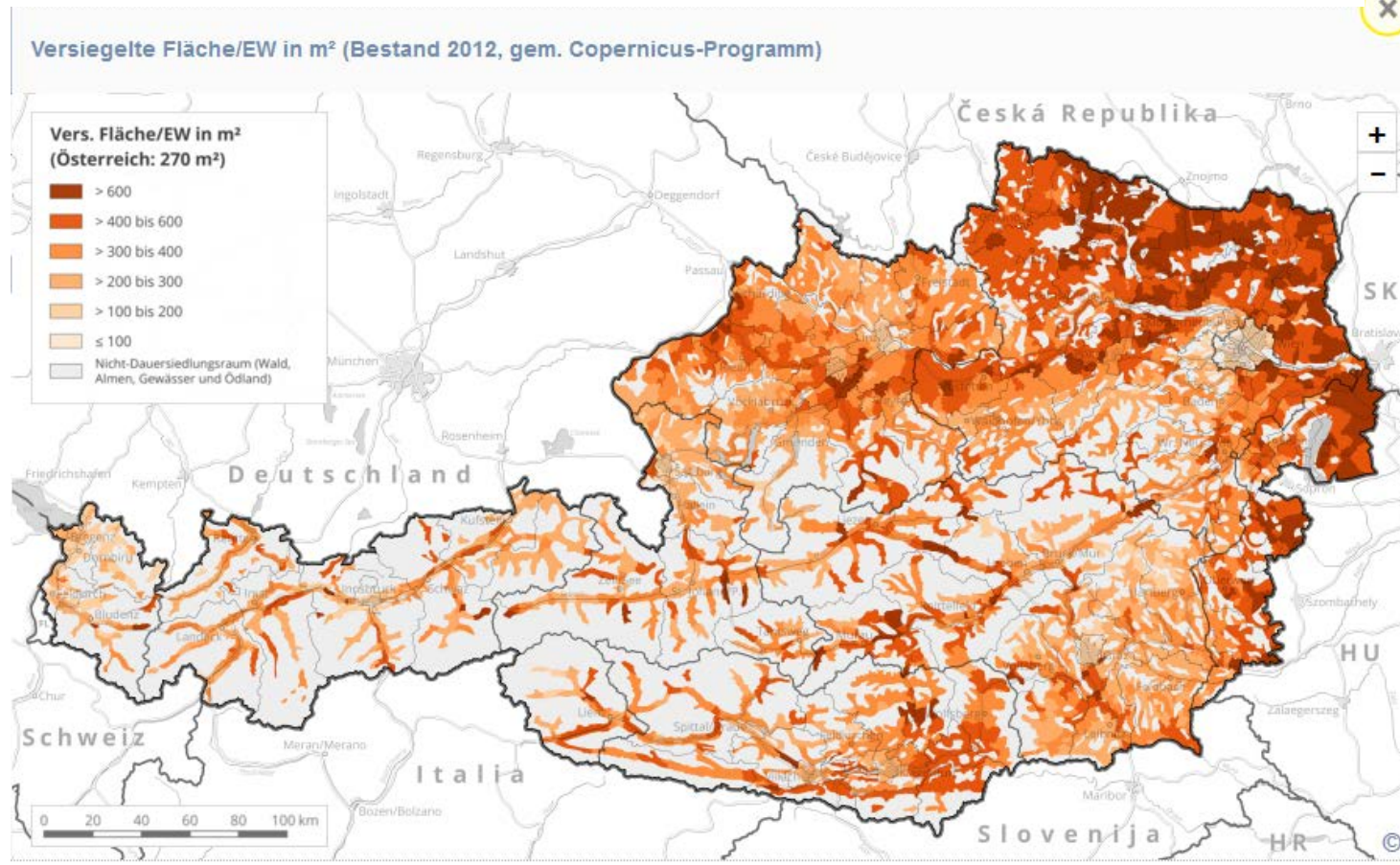
- Increase in land-intensive building types, e.g. shopping centres



Source: RegioData, 2013

Soil Sealing

Sealed area per inhabitant in m²; Austrian average: 270 m² per inh.



archiv

Source: www.oerok-atlas.at/#indicator/61, 28.10.2015

Causes for an Increase in Land Take



- Increase in traffic areas
- **Structural and land use changes in farming:** land owner interests to increase land values by getting land zoned as building land
- **Municipal financing** is based on number of inhabitants and number of employees: incentives for municipalities to zone building land, competition between municipalities
- Limited effectiveness of spatial planning instruments



Many **local decisions** lead to undesirable consequences from a **regional perspective**, like high amounts of **land take** and **urban (housing) sprawl**.