Planbureau voor de Leefomgeving

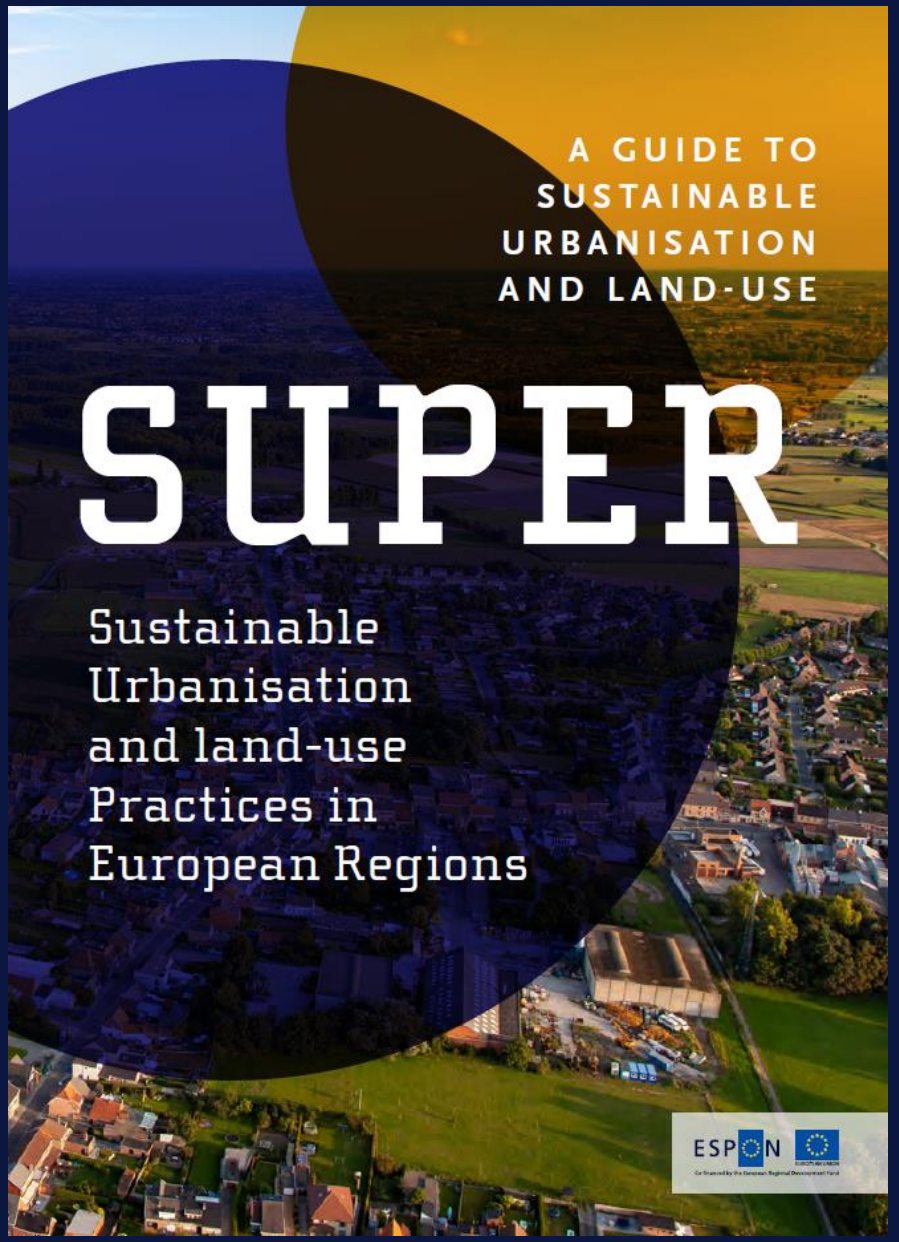
The (Un)sustainability of European Urbanization

Seminar Latvia 26 September 2025

David Evers

1

Urbanization 2000-2018

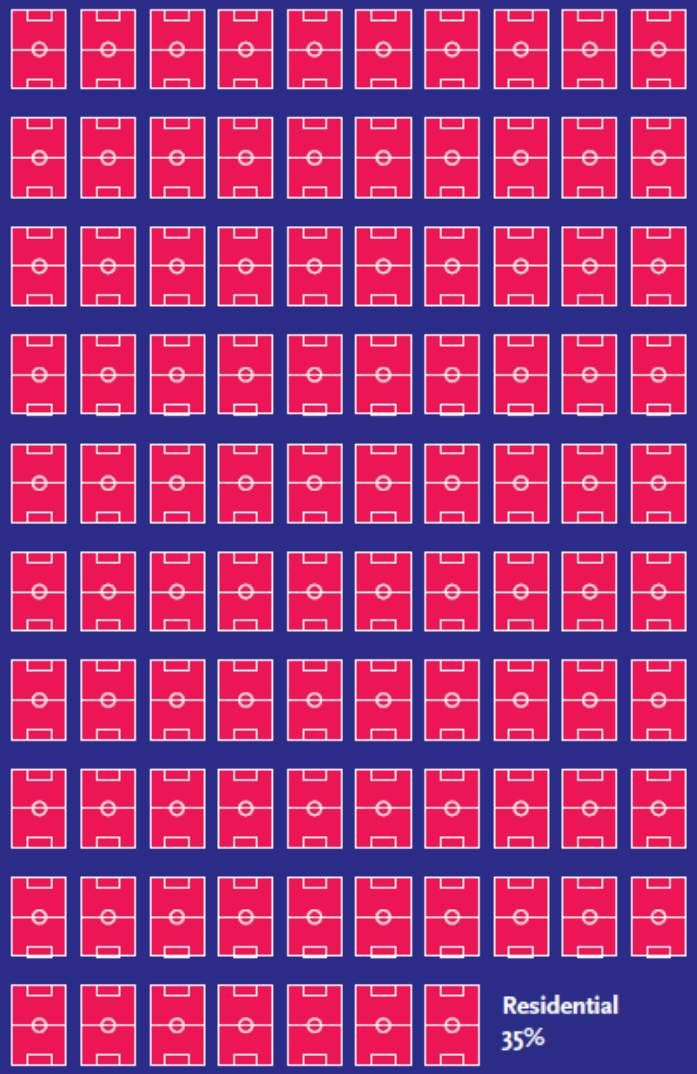


https://archive.espon.eu/super

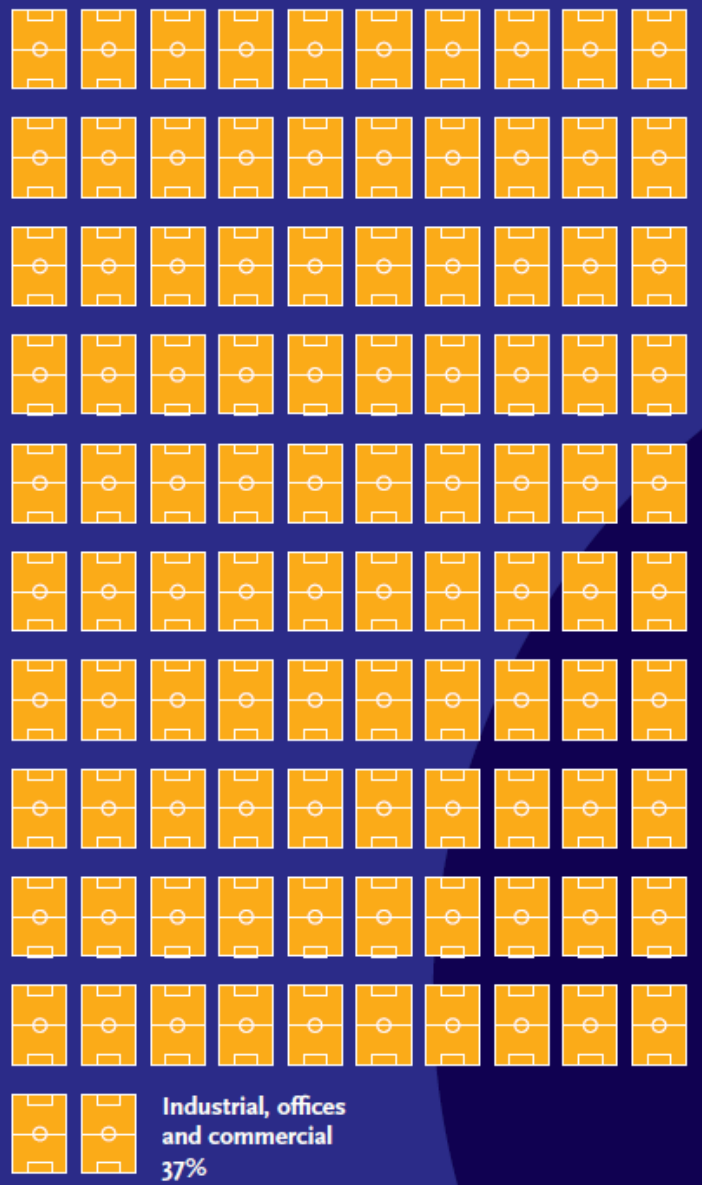
How many football fields per day?

Land use change from **agriculture** or **nature** to...

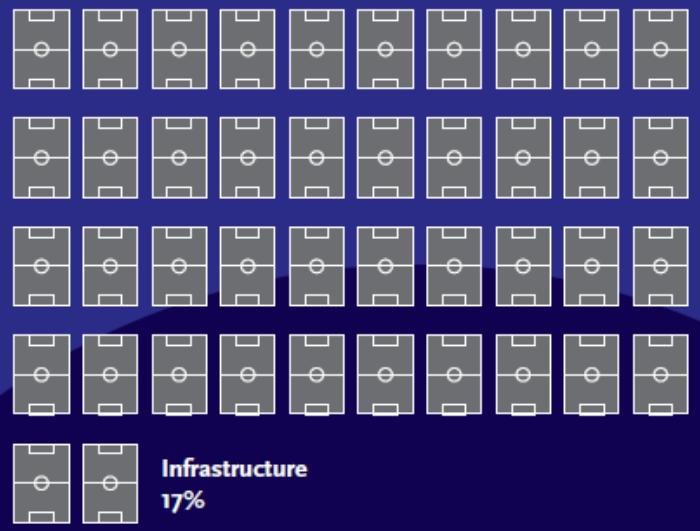
About 1.17 million hectares of land were converted to urban use in the ESPON space in the 2000-2018 period. This equals about 248 football fields per day. Of this, 35% became urban fabric (predominantly residential), 37% industrial (including business parks, shopping centres and offices), 17% infrastructure (including airports) and 11% urban green.



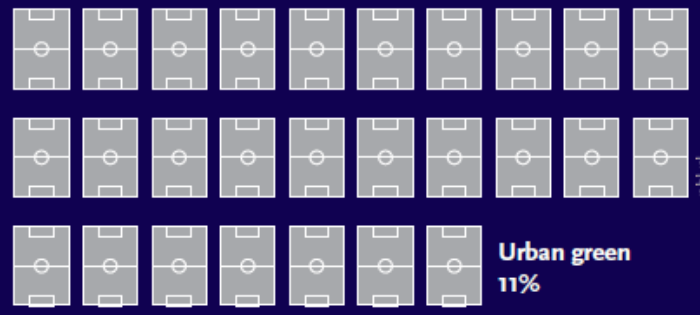
Residential
35%



Industrial, offices and commercial
37%

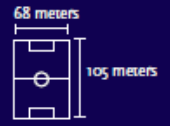


Infrastructure
17%



Urban green
11%

Standard football field for UEFA



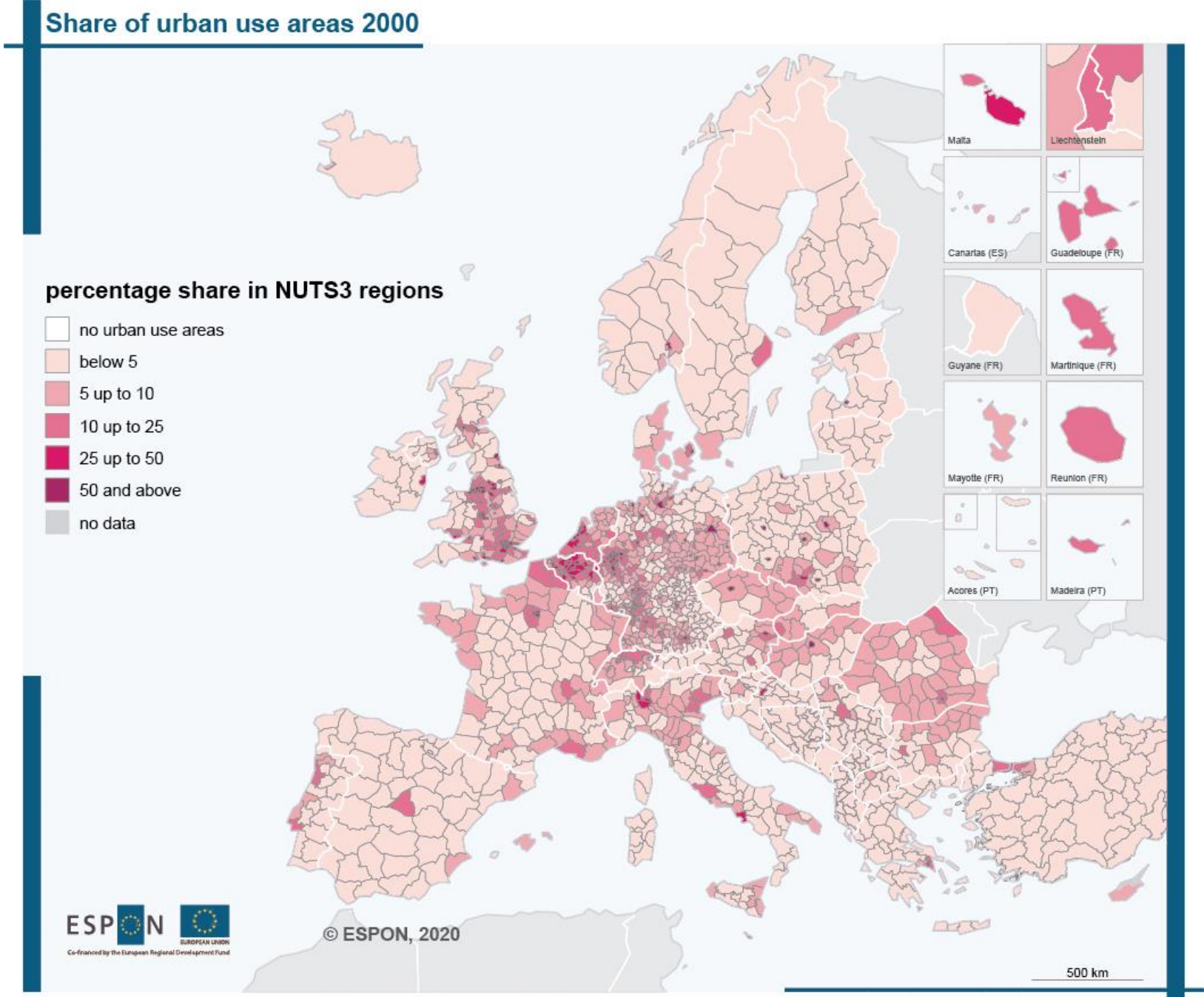
pbl.nl

EU target: no net urbanization by 2050

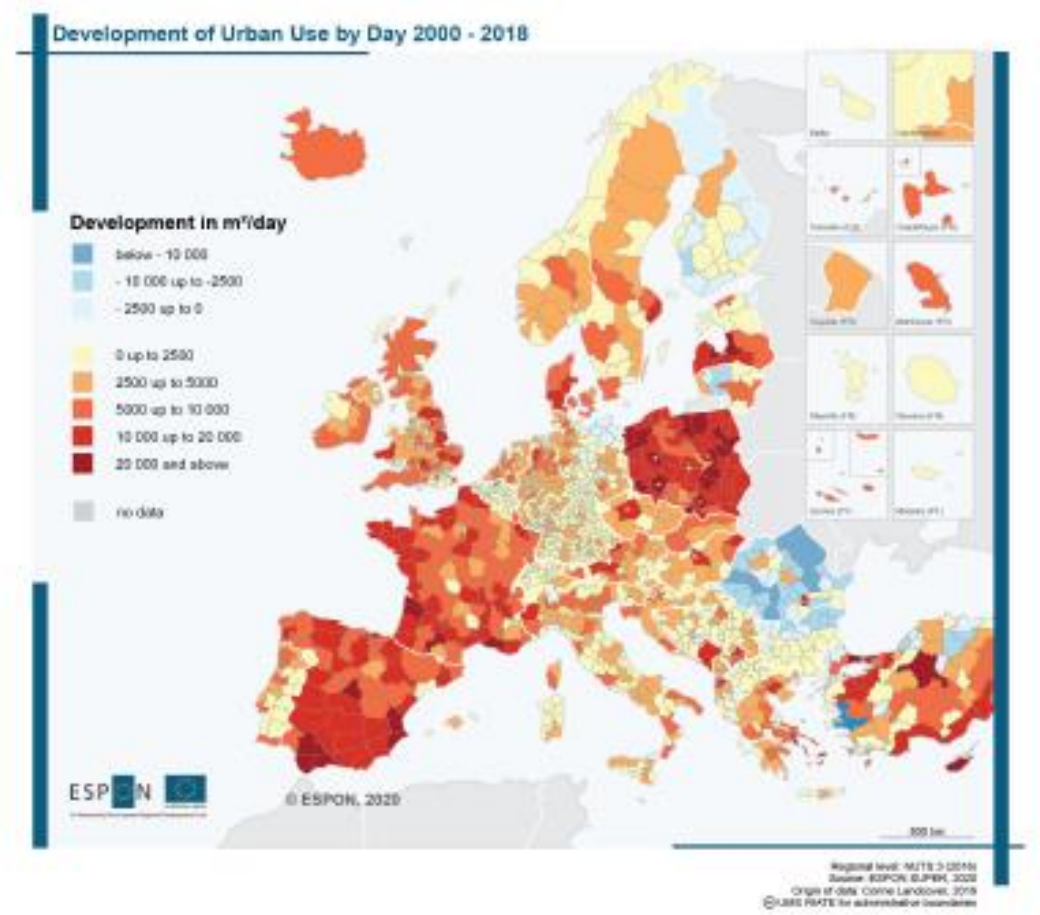
Between 2000-2018, about 1.17 million hectares of land was converted into urban use.

This is approximately 250 football fields per day.

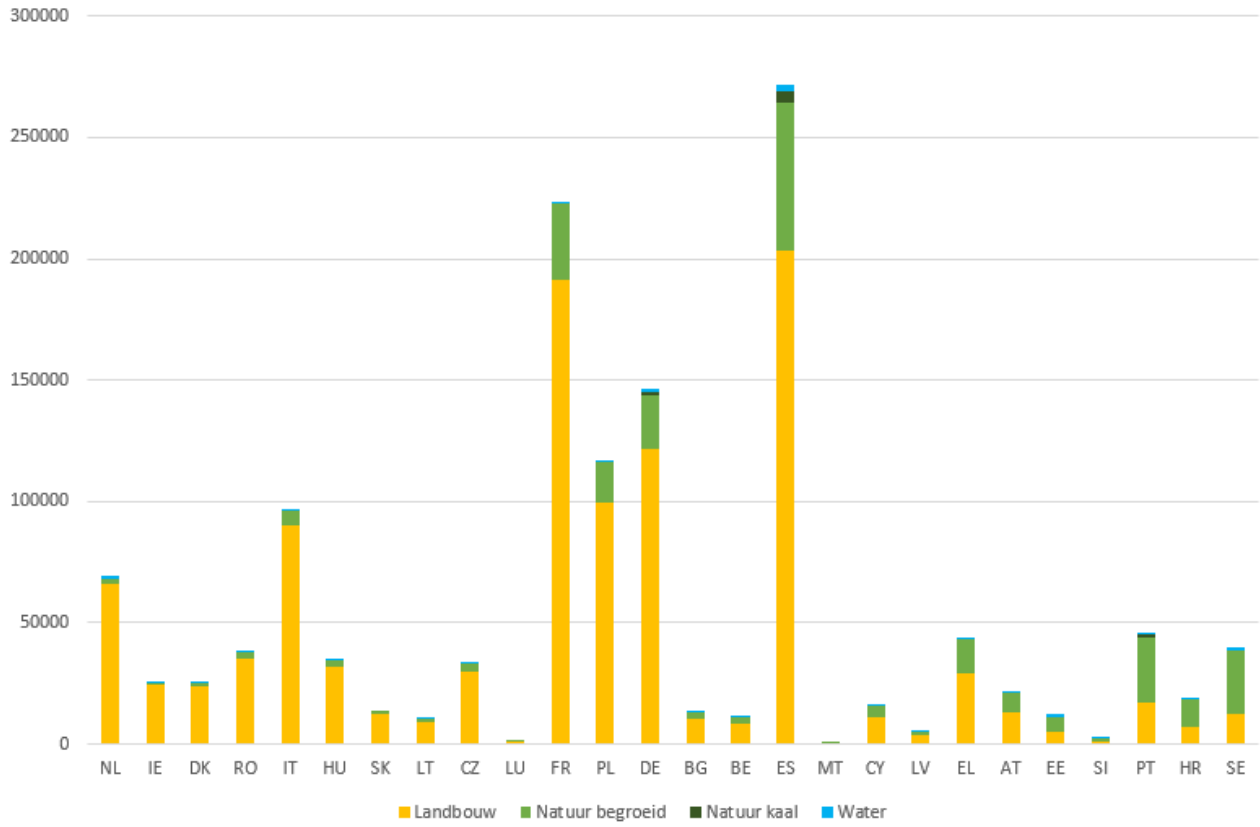
8x as much land converted to urban than back



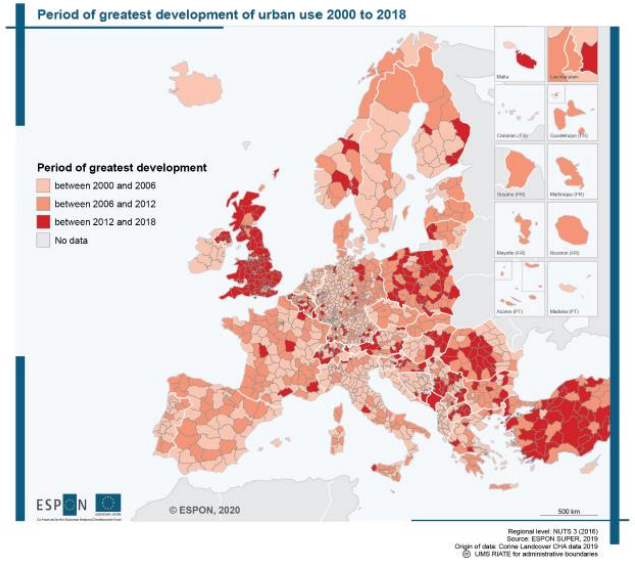
Sustainable urbanization?

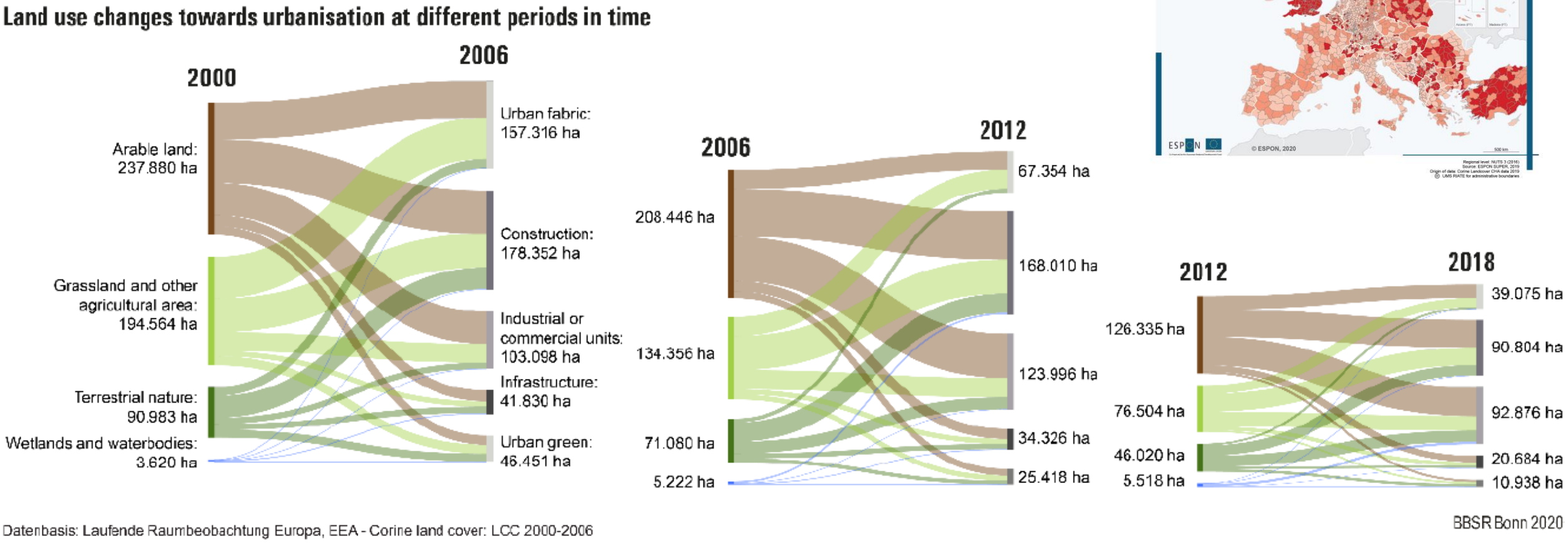


Original function of land before urbanization



Sustainable urbanization?





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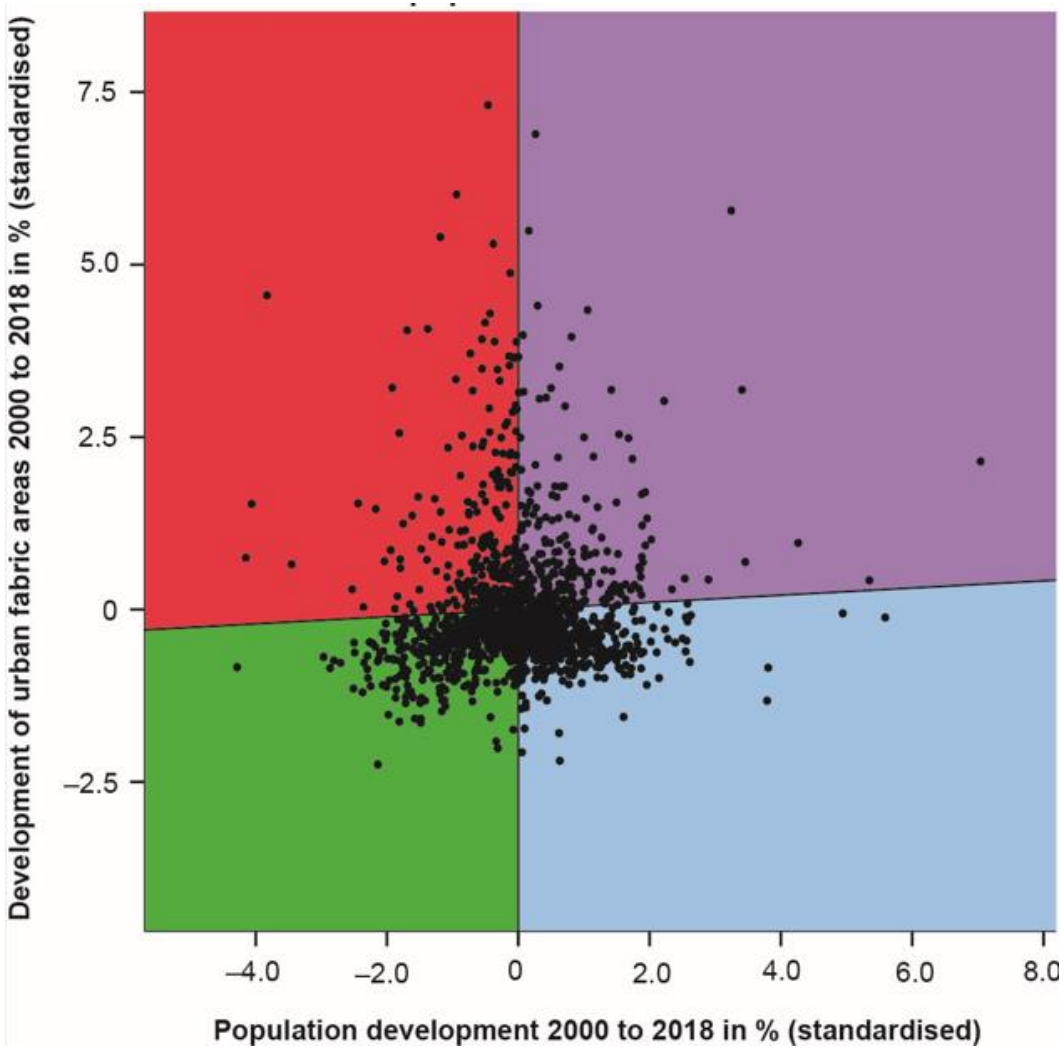
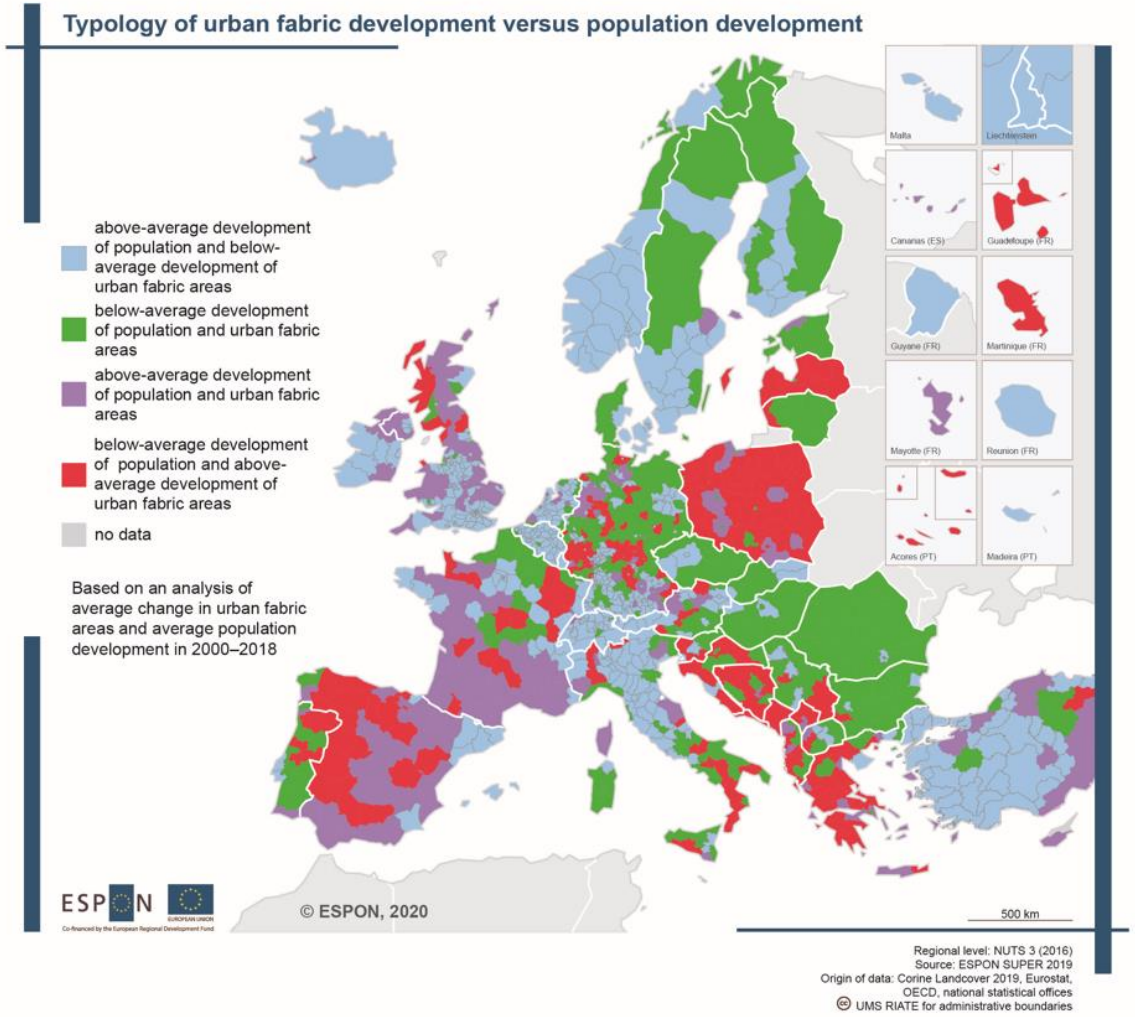
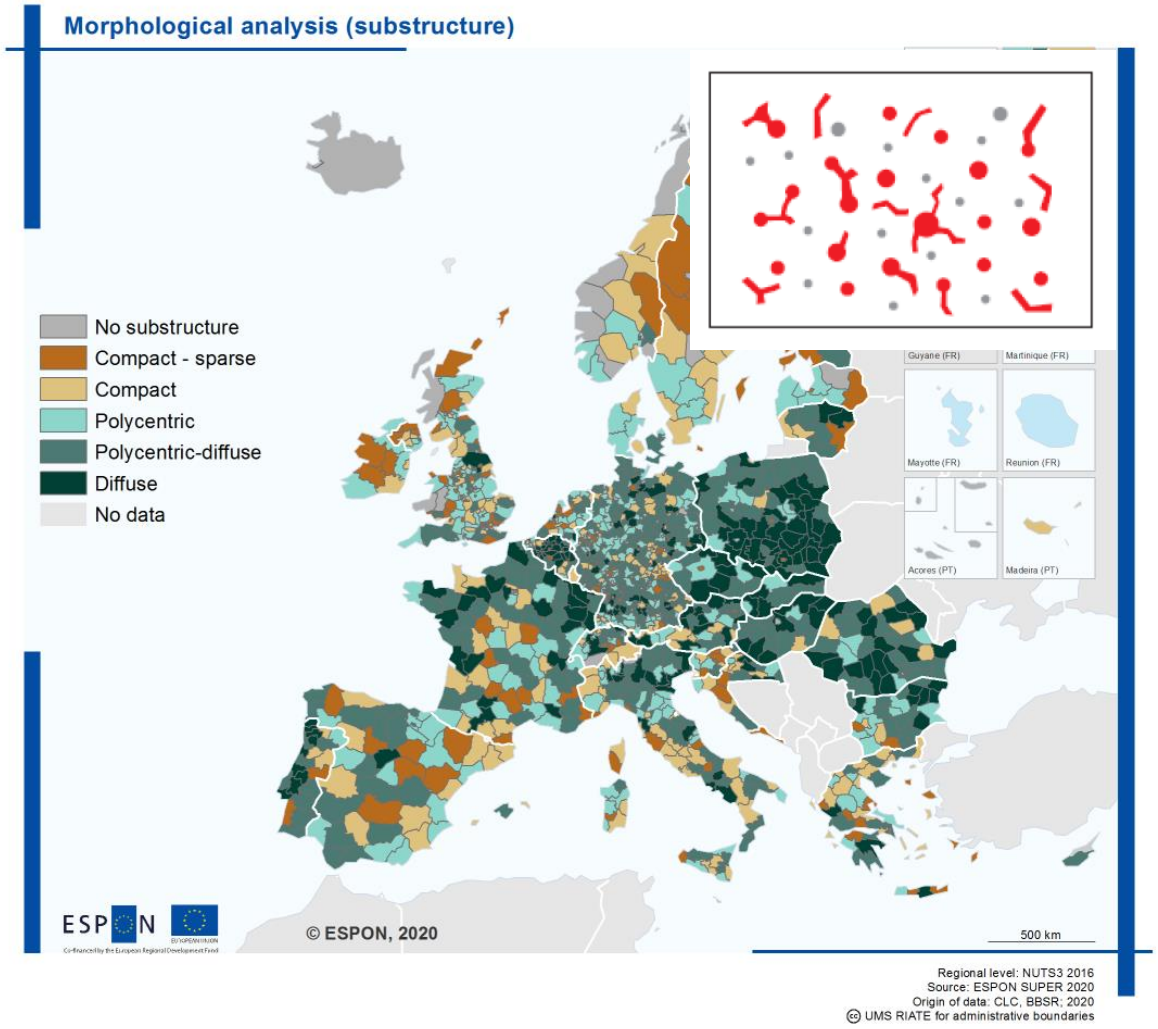
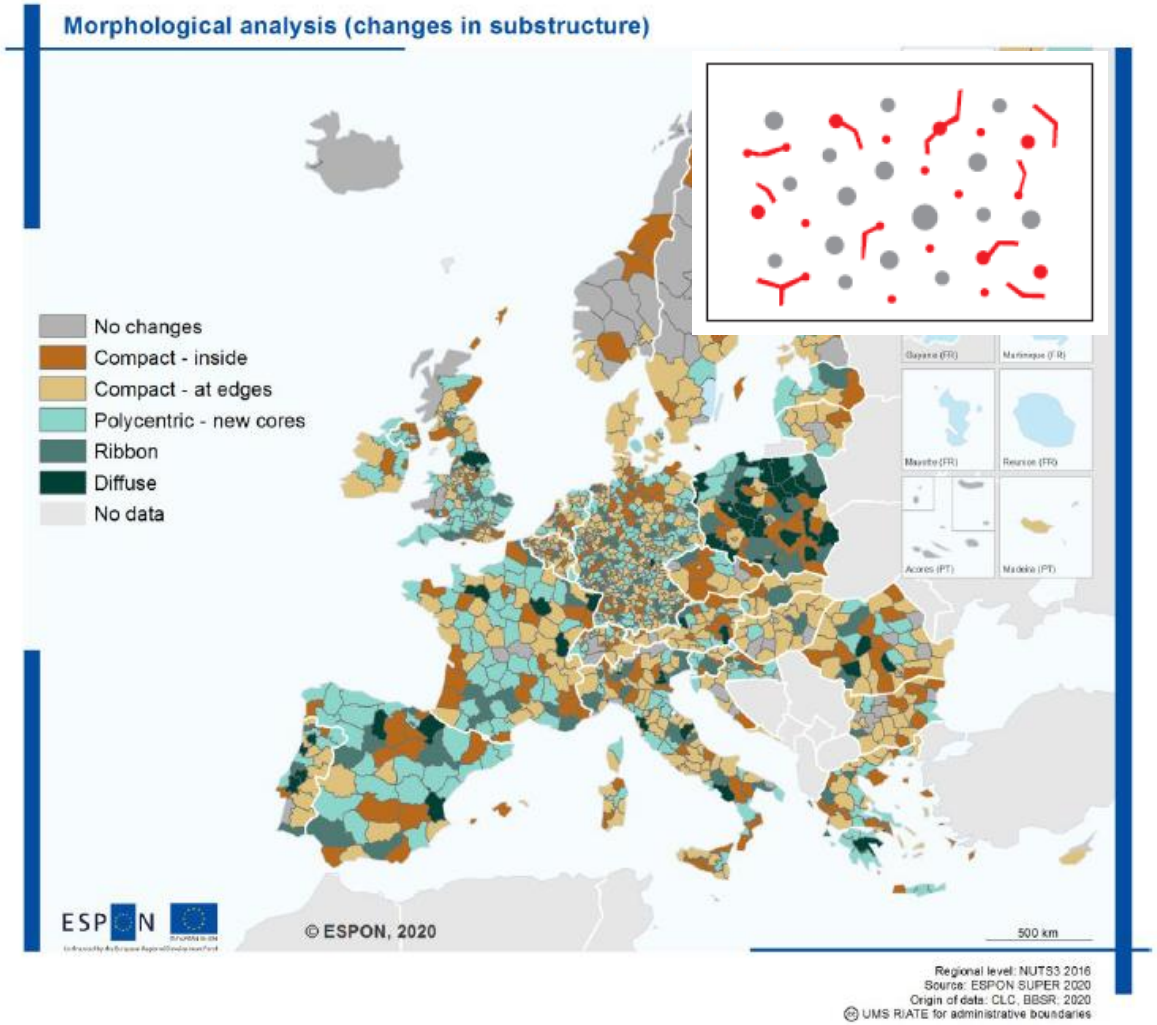
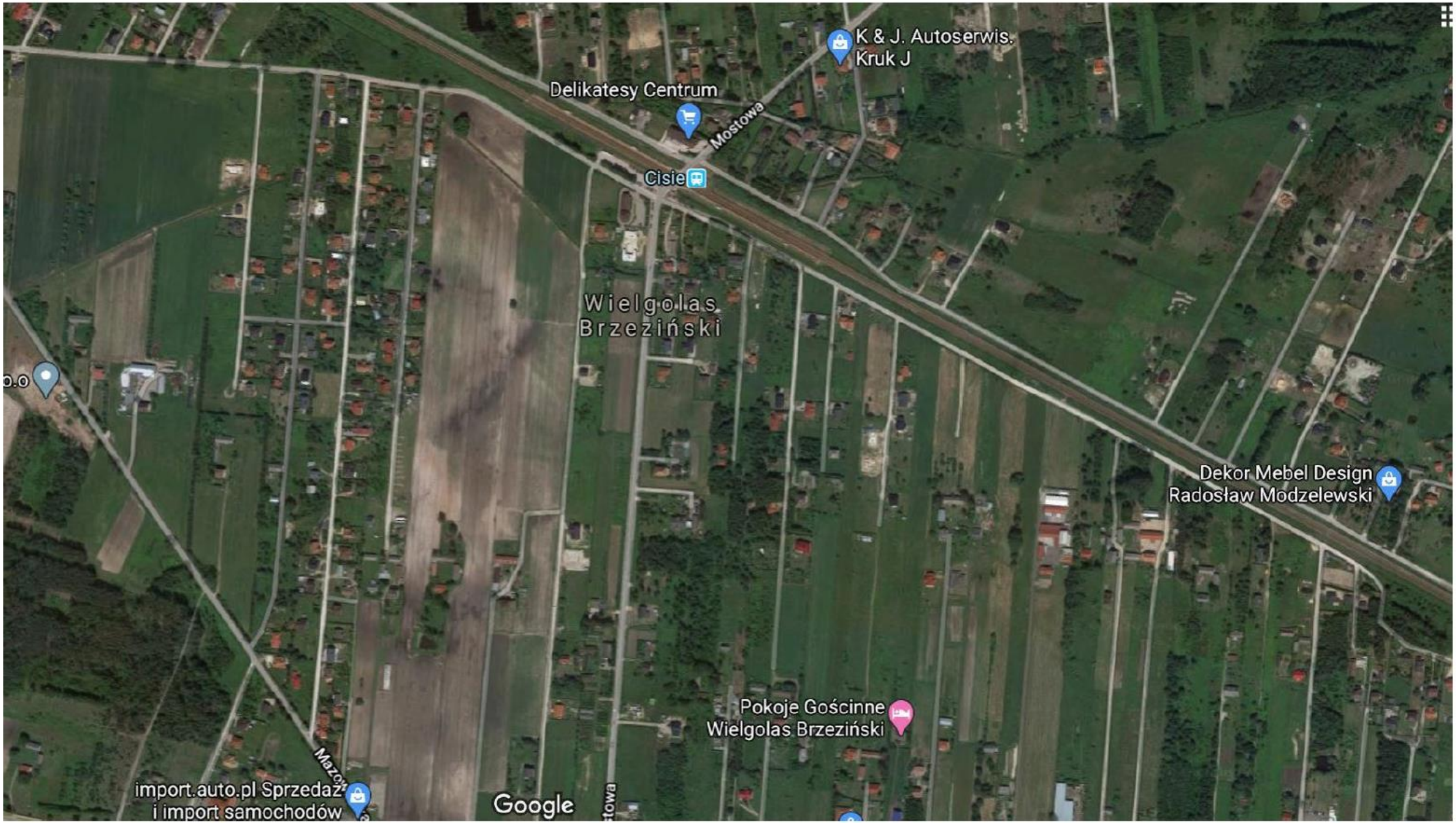




Sustainable urbanization?






K & J. Autoserwis.
Kruk J
Delikatesy Centrum
Mostowa
Cisie
Wielgolas
Brzeziński
Dekor Mebel Design
Radosław Modzelewski
Pokoje Gościnne
Wielgolas Brzeziński
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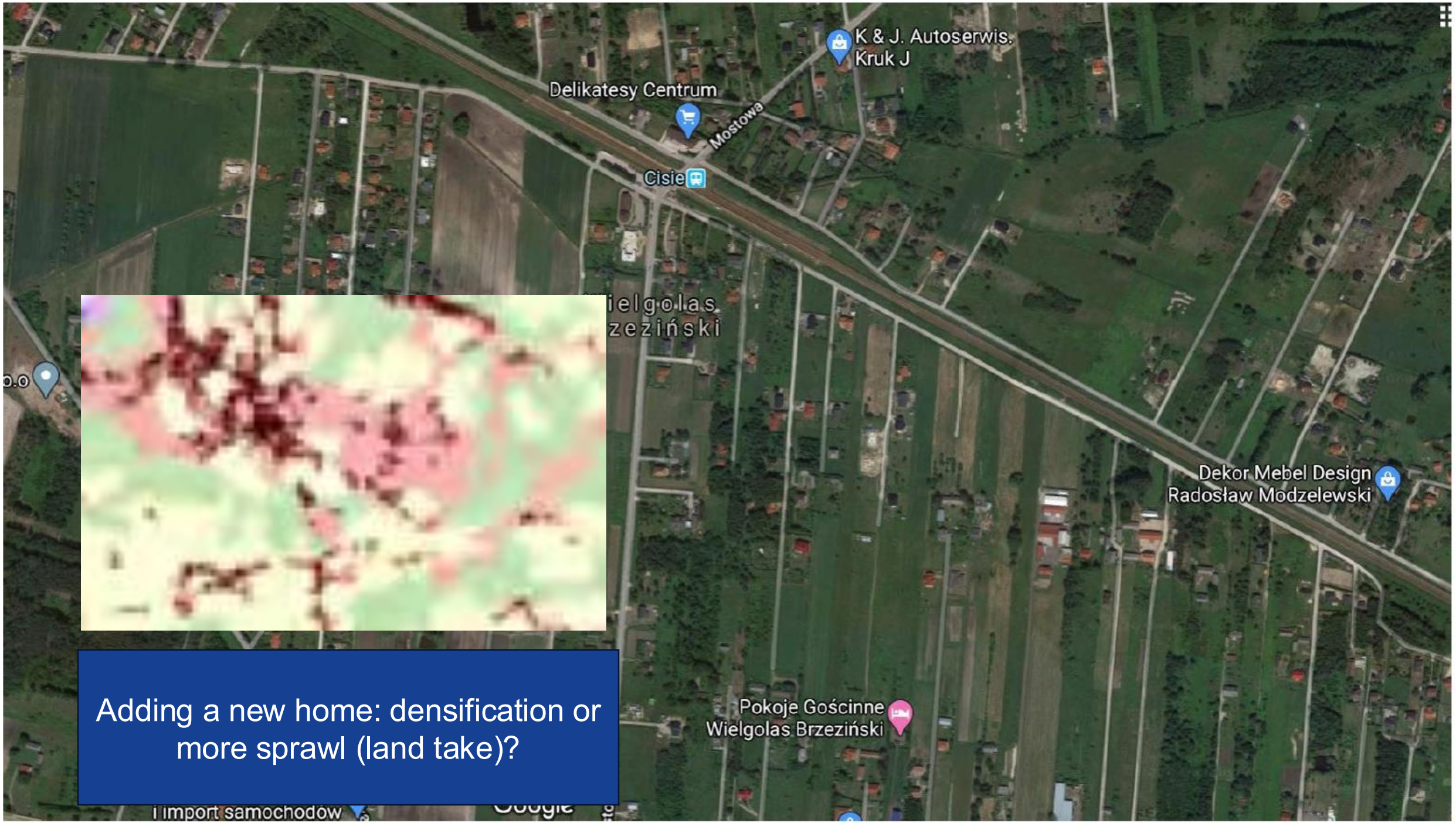
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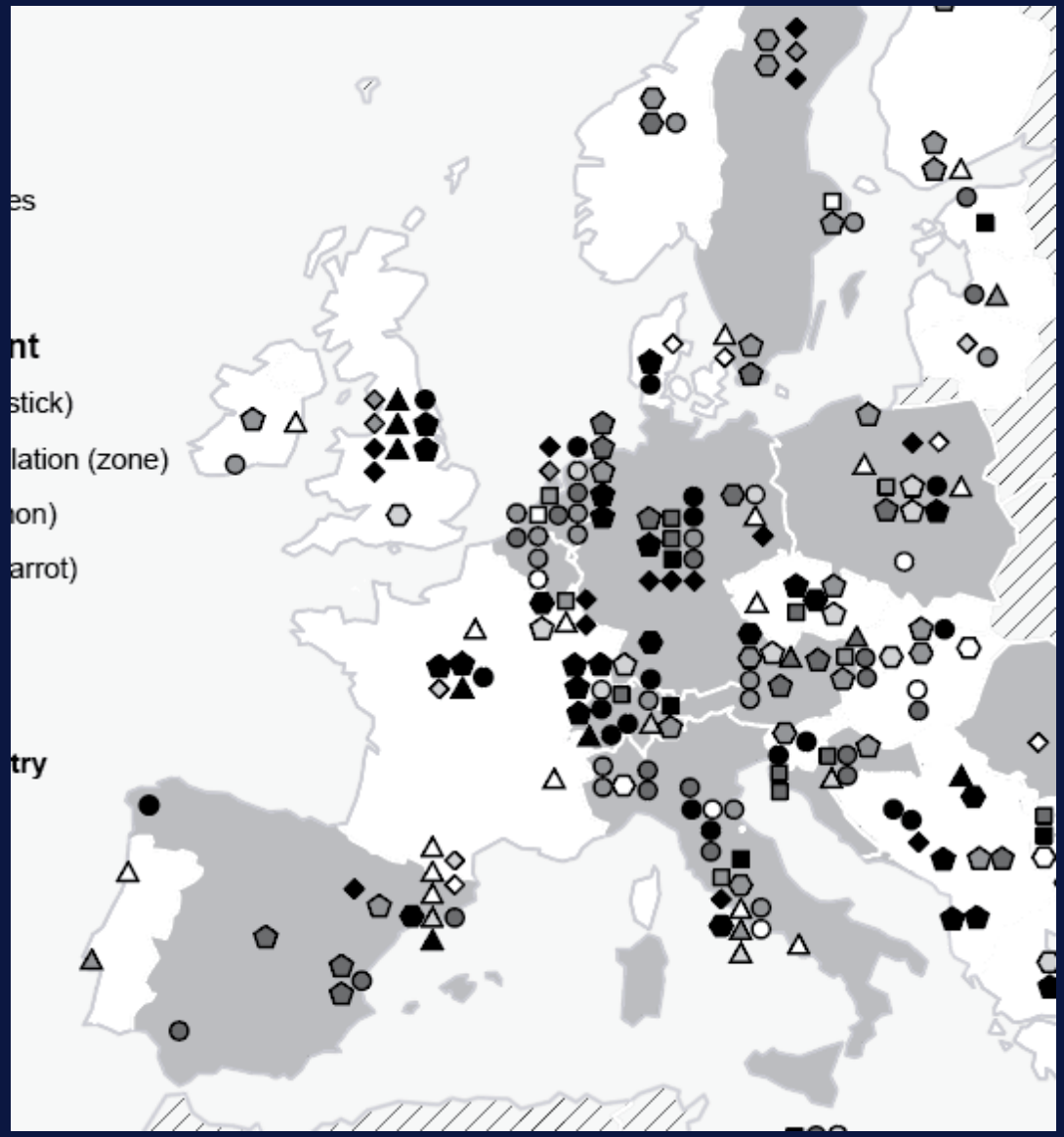
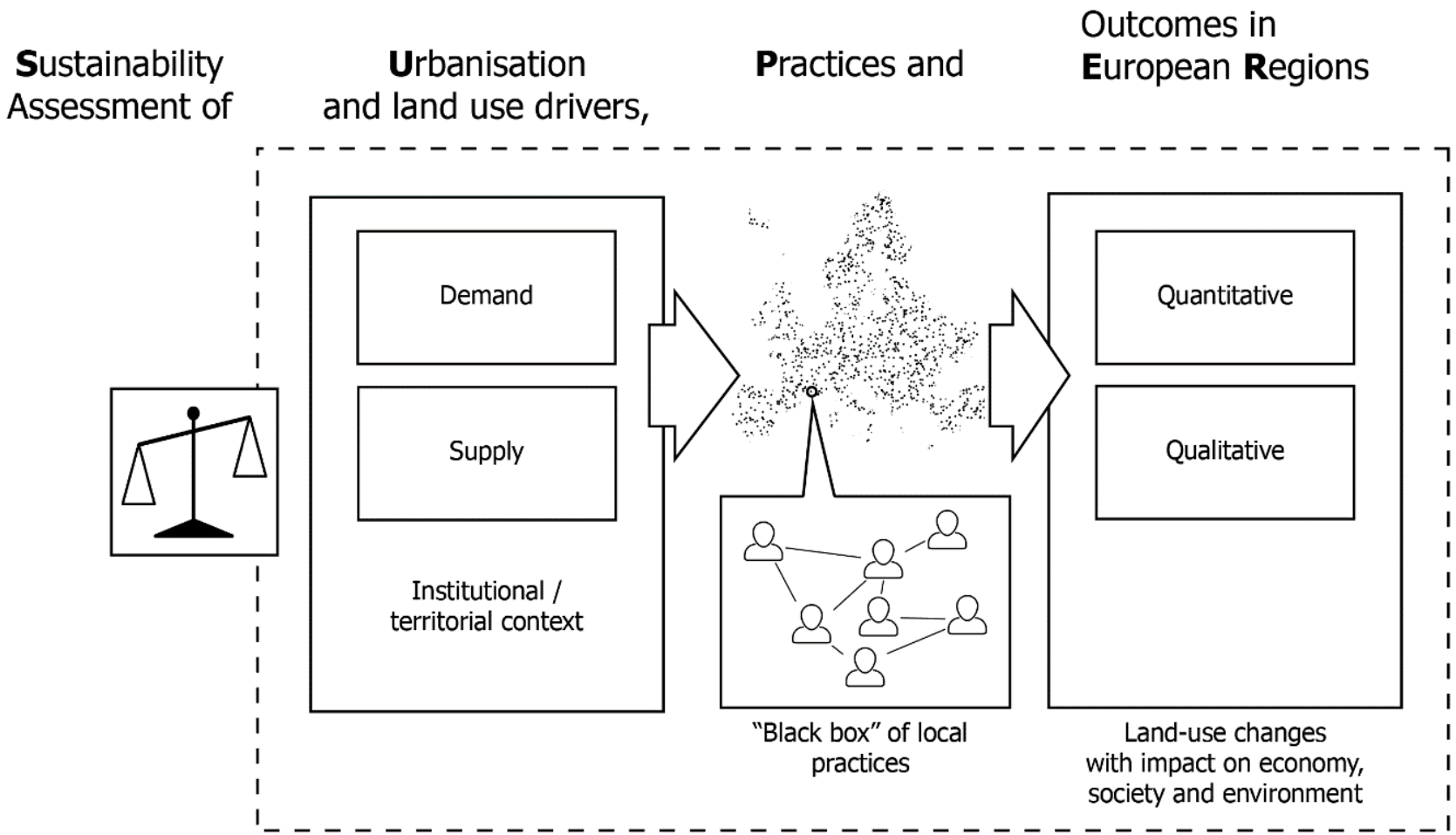
Pokoje Gościnne
Wielgolas Brzeziński
Adding a new home: densification or more sprawl (land take)?

2

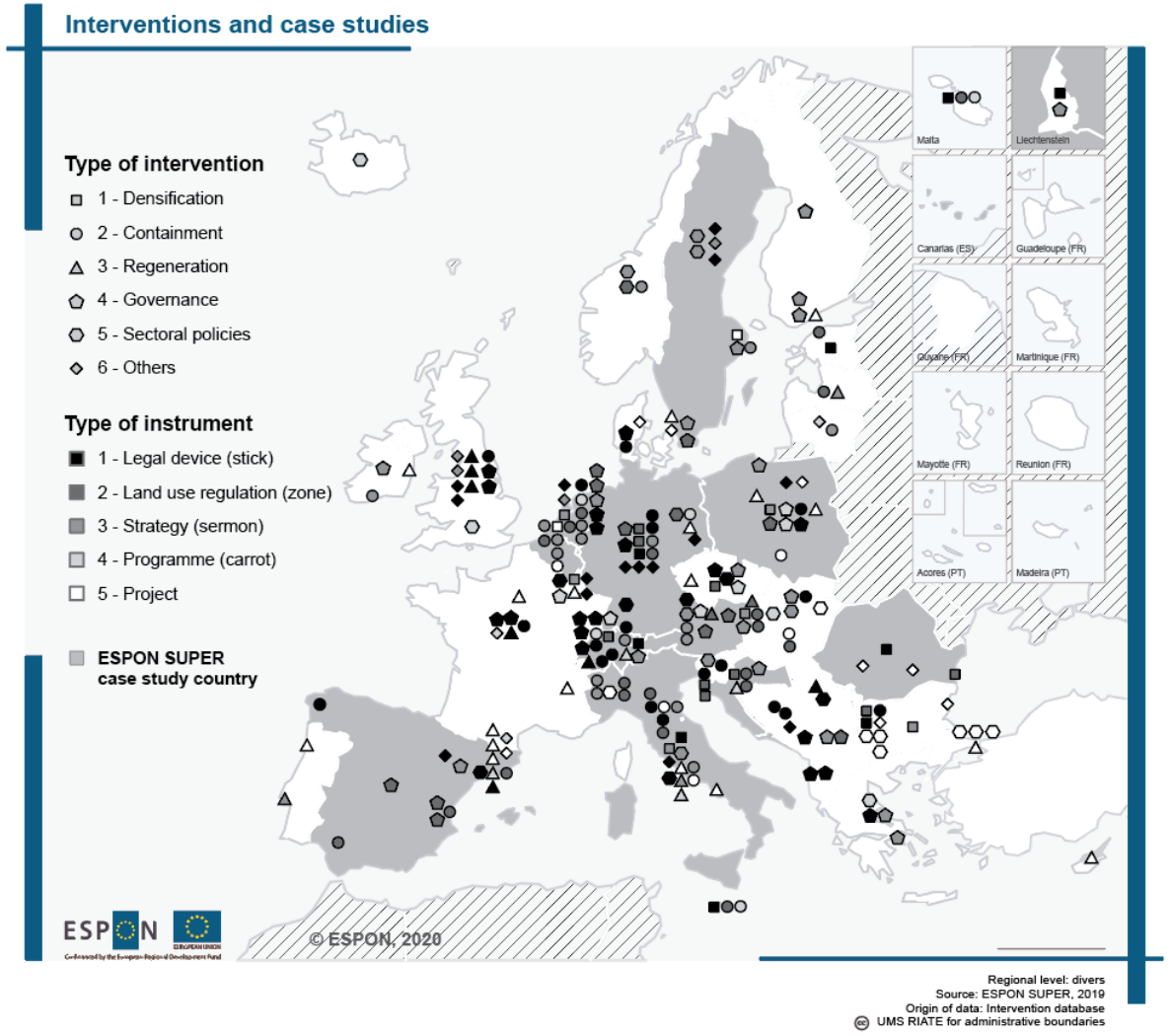
Interventions and spatial planning

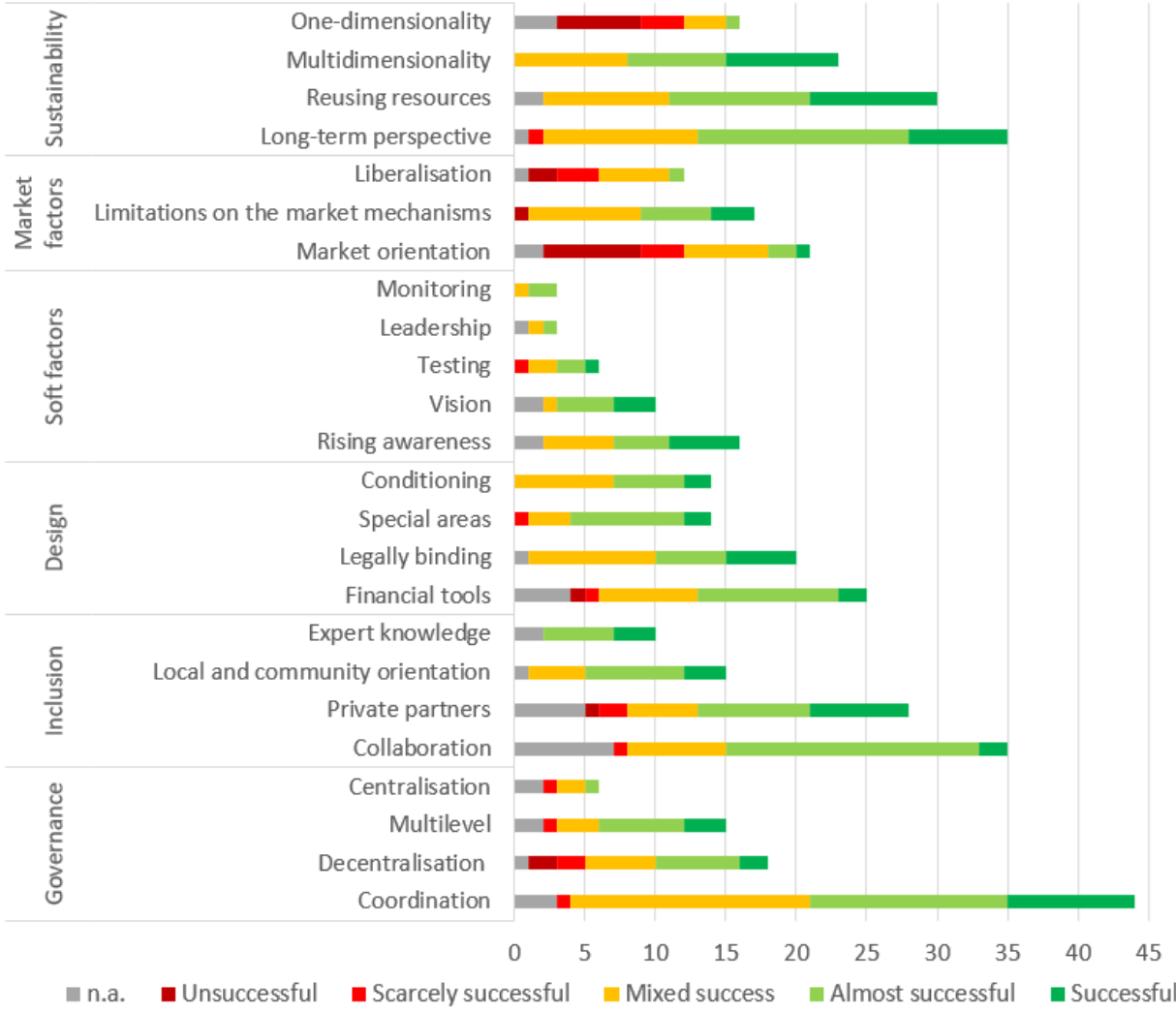


Cause/effect relationship (SUPER)



Interventions and success factors





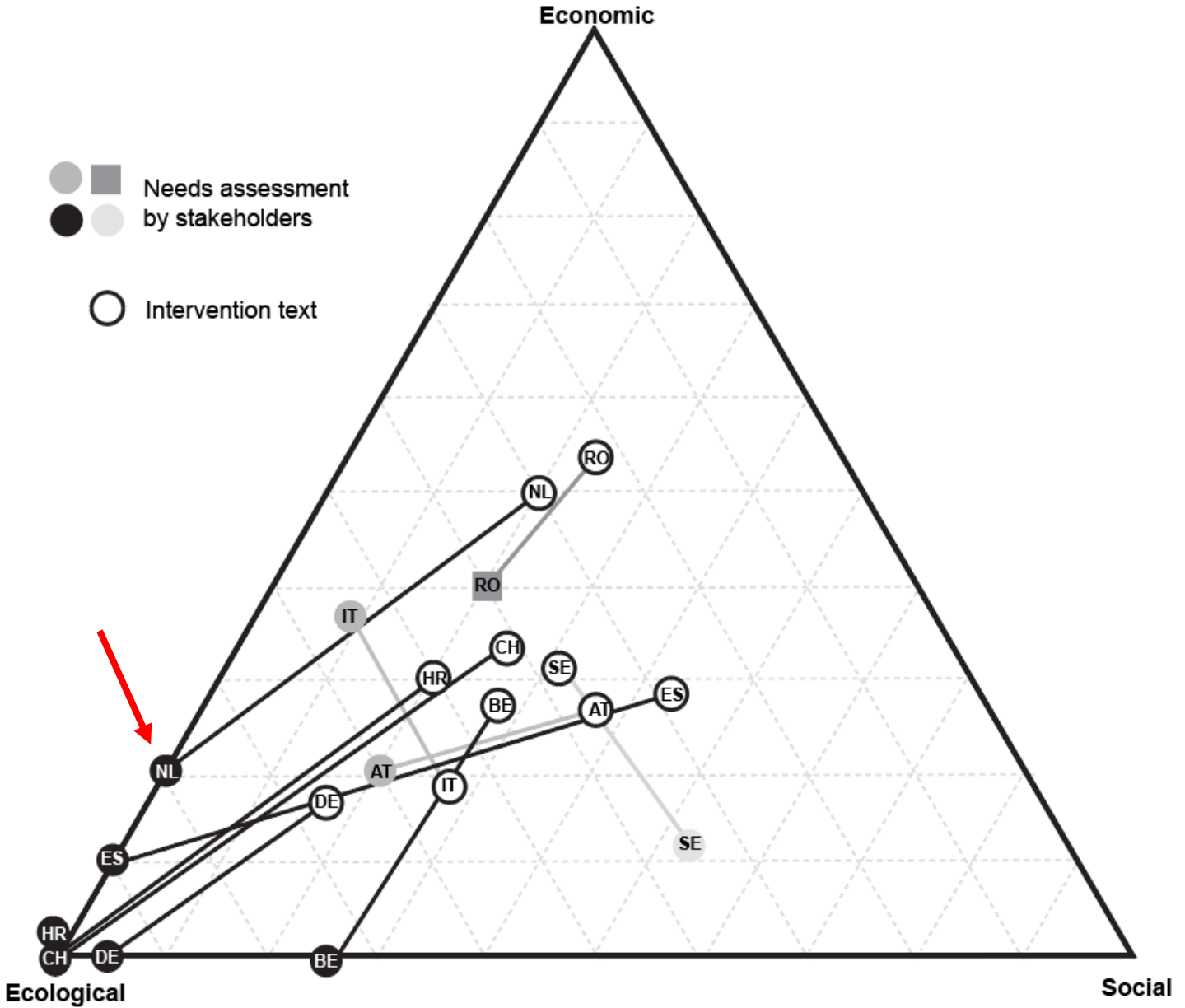
INFOGRAPHIC 8

Toolbox of instruments for sustainable urbanisation

Sustainable urbanisation and land use can be achieved through the implementation of a variety of instruments. These are not mutually exclusive and can be easily combined to produce synergy and improve effectiveness. The SUPER project identified five types of instruments: visions and strategies, rules and legal devices, land use regulations, programmes and projects.

Interventions

- Case studies (n=11) on the rationale, working and outcomes
- Need was identified in ecological terms, but the policy text tended to be broader (ES)
- Impact (contrapositive) was seen as significant and positive due to (1) change in mentality and (2) planning innovations like cooperation and strategy



Urbanization is a social construct

Land-use development practices =

Socioeconomic developments X Policy

…so the future is (partly) in our hands.

2

Scenarios for 2050

Diffuse scenario

- **Rationale**
  - Starting in 2020, a policy of urban diffusion was embarked upon to allow and encourage Europeans to enjoy the pleasures of countryside living.

- **Policy package**
  - Planning policies abolished; only Natura 2000 areas remain
  - Building along existing roadways in a piecemeal fashion

Polycentric scenario

- **Rationale**
  - Starting in 2020, a policy of urban clustering was promoted throughout Europe to create human-scale communities with good accessibility to cities and open green space.

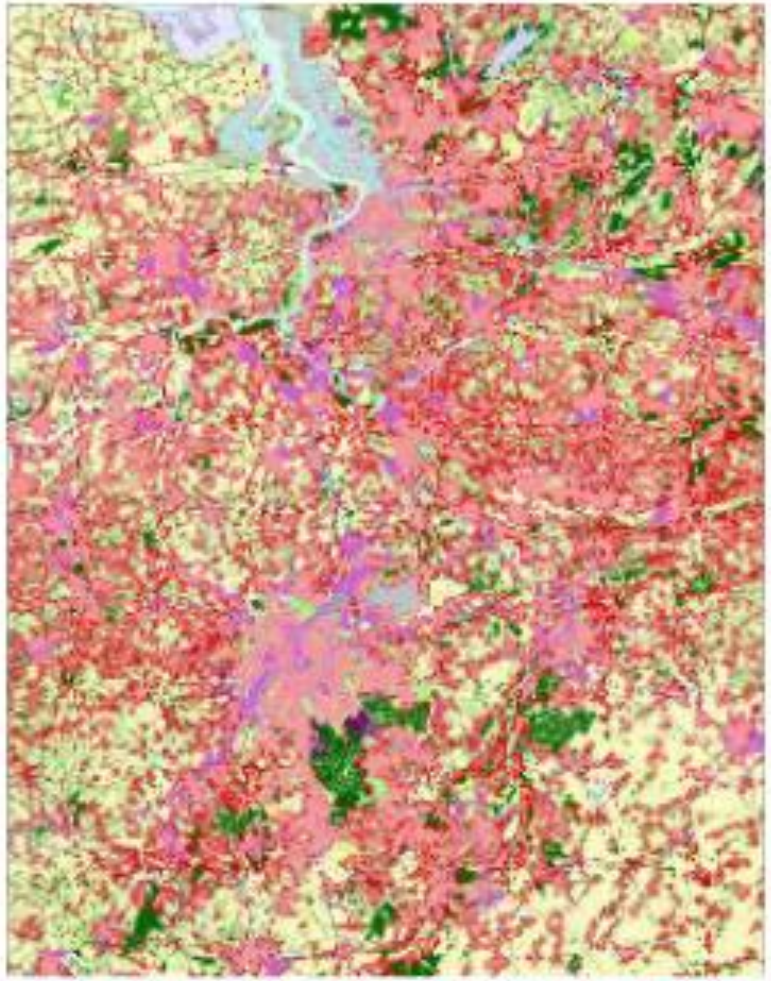
- **Policy package / model input**
  - 30% infill development objective
  - Building in and around midsize towns, preferably near rail stations

Compact scenario

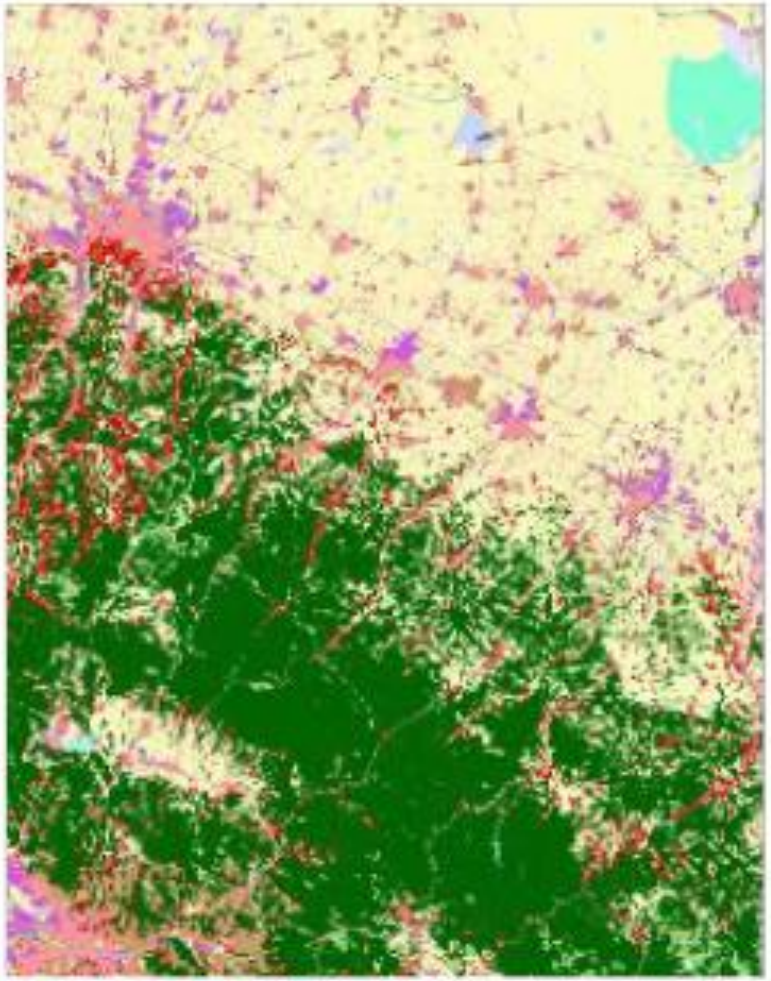
- **Rationale**
  - Starting in 2020, a policy of urban containment was promoted throughout Europe to promote the vitality of cities, allow for high-quality public services and enhance sustainability.

- **Policy package**
  - 50% infill development objective
  - Building encouraged in and around cities

Diffuse scenario



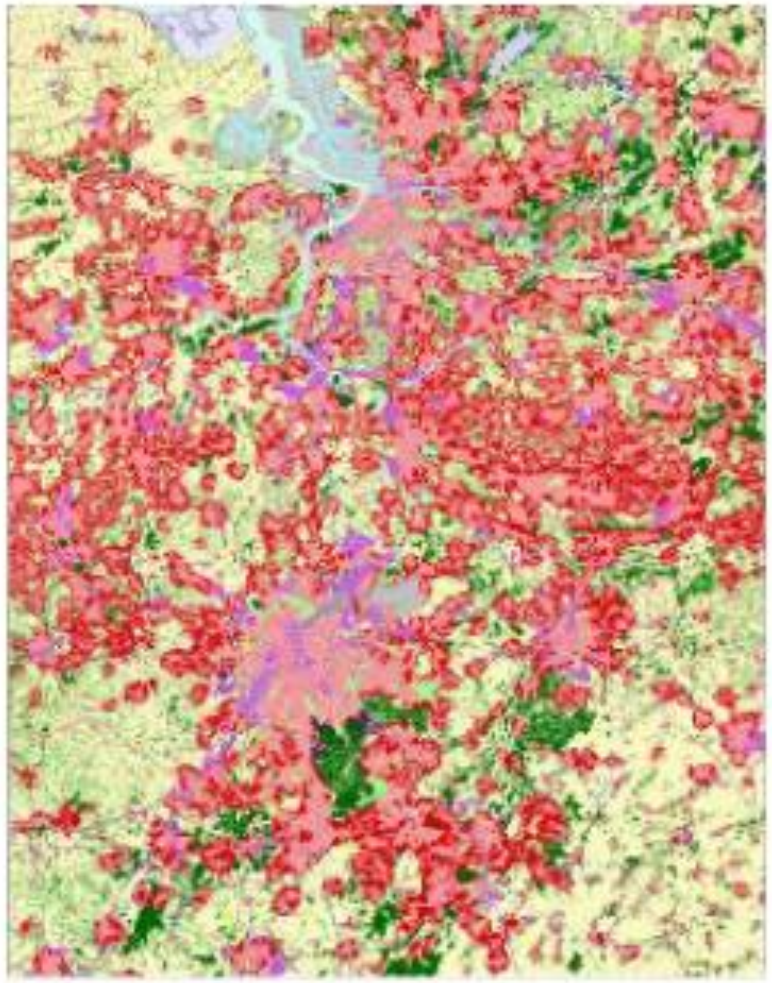
Bruxelles-Antwerp region, Belgium



Bologna-Ravenna region, Italy

Randstad region, Netherlands

Polycentric scenario



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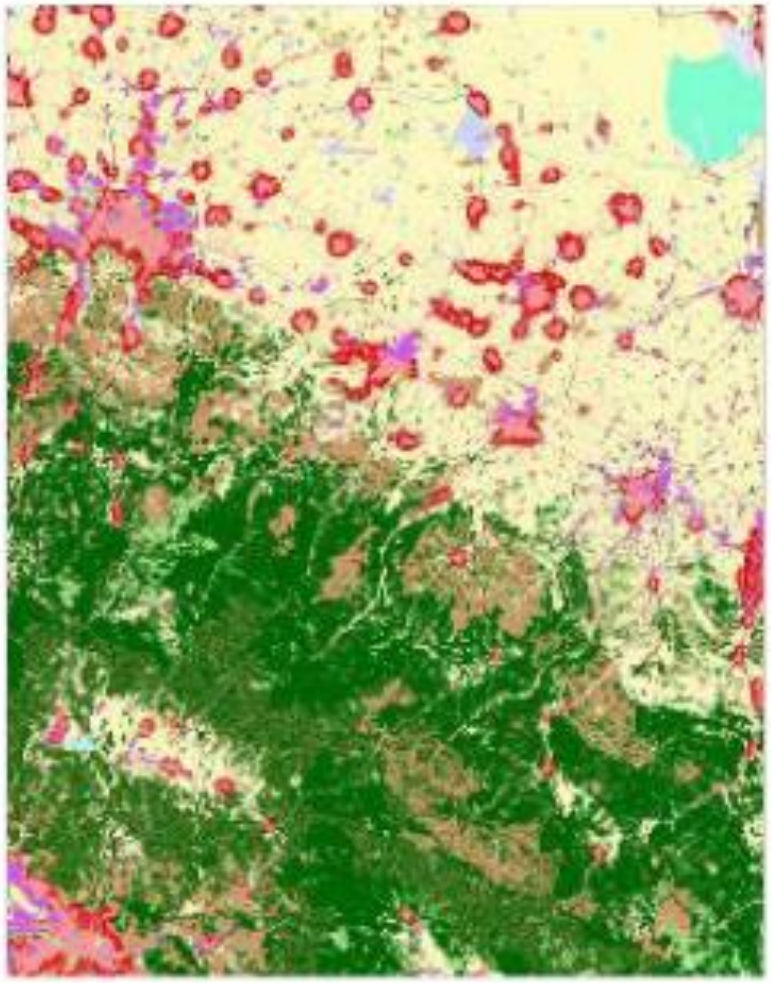
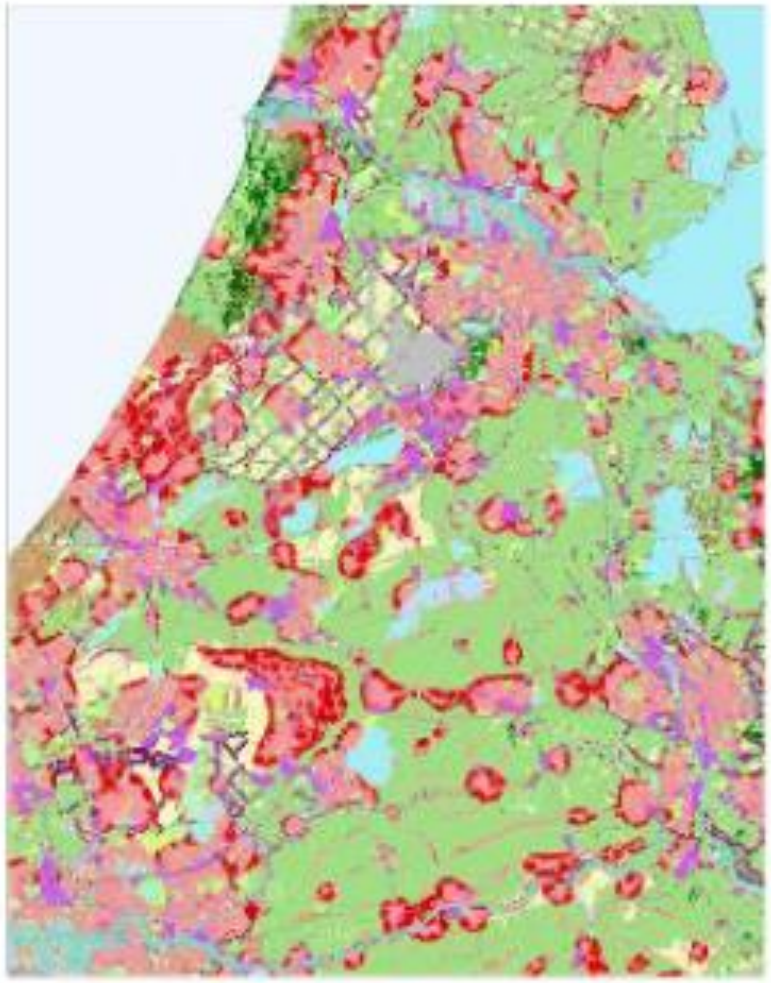
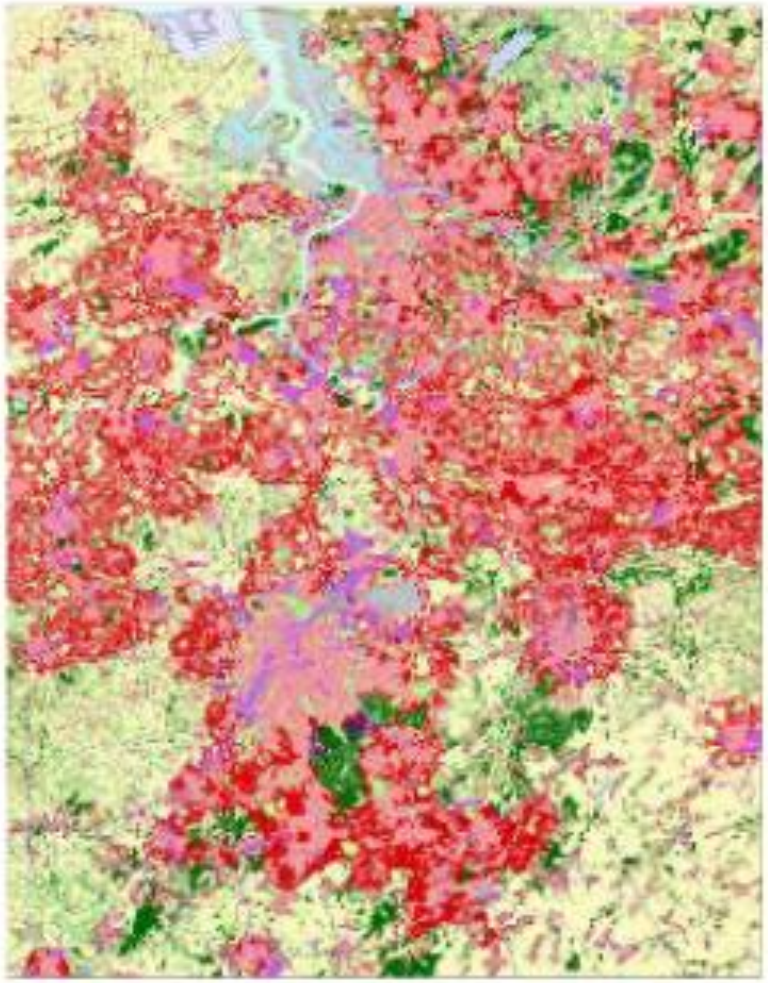


Bologna-Ravenna region, Italy



Randstad region, Netherlands

Compact scenario



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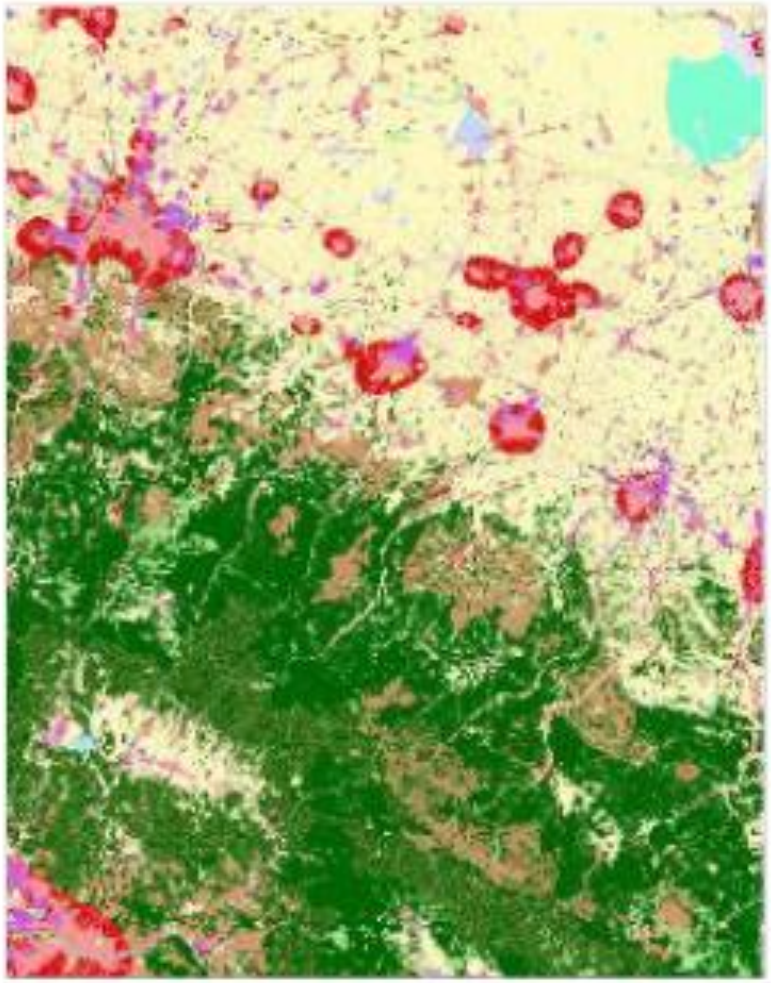

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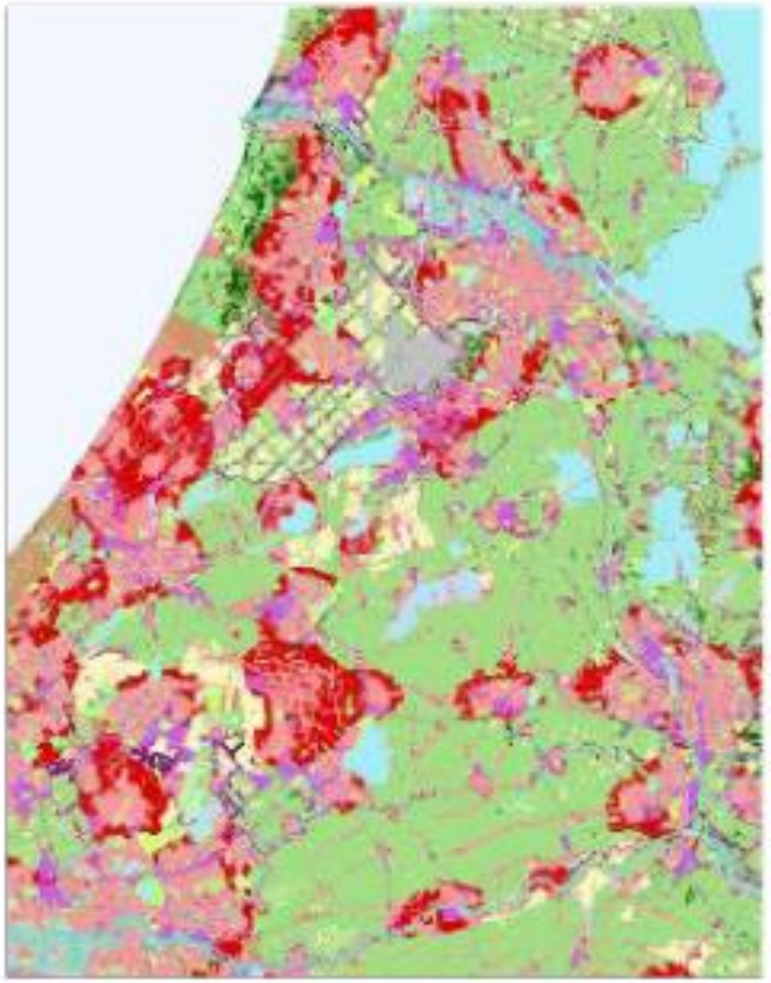
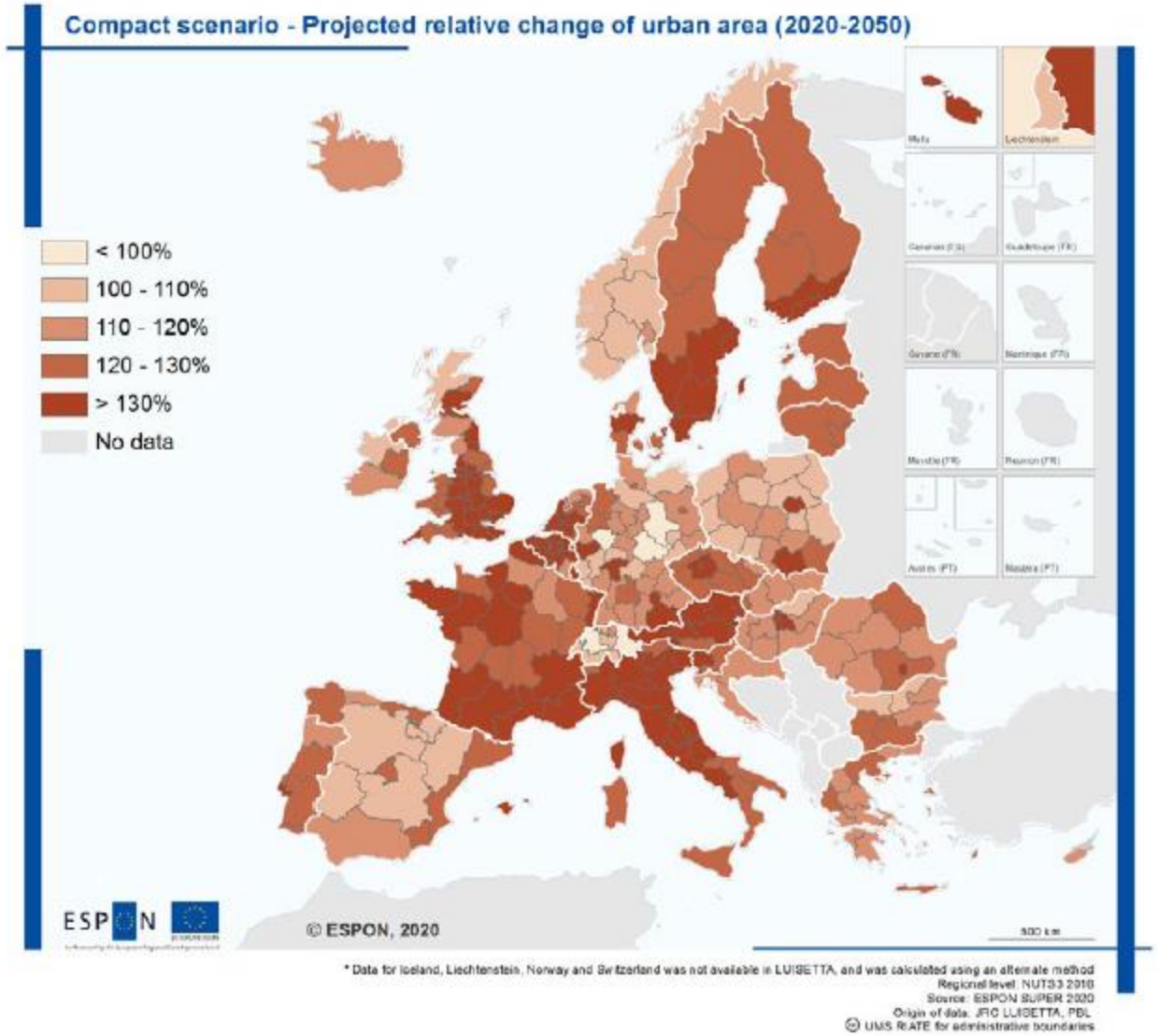
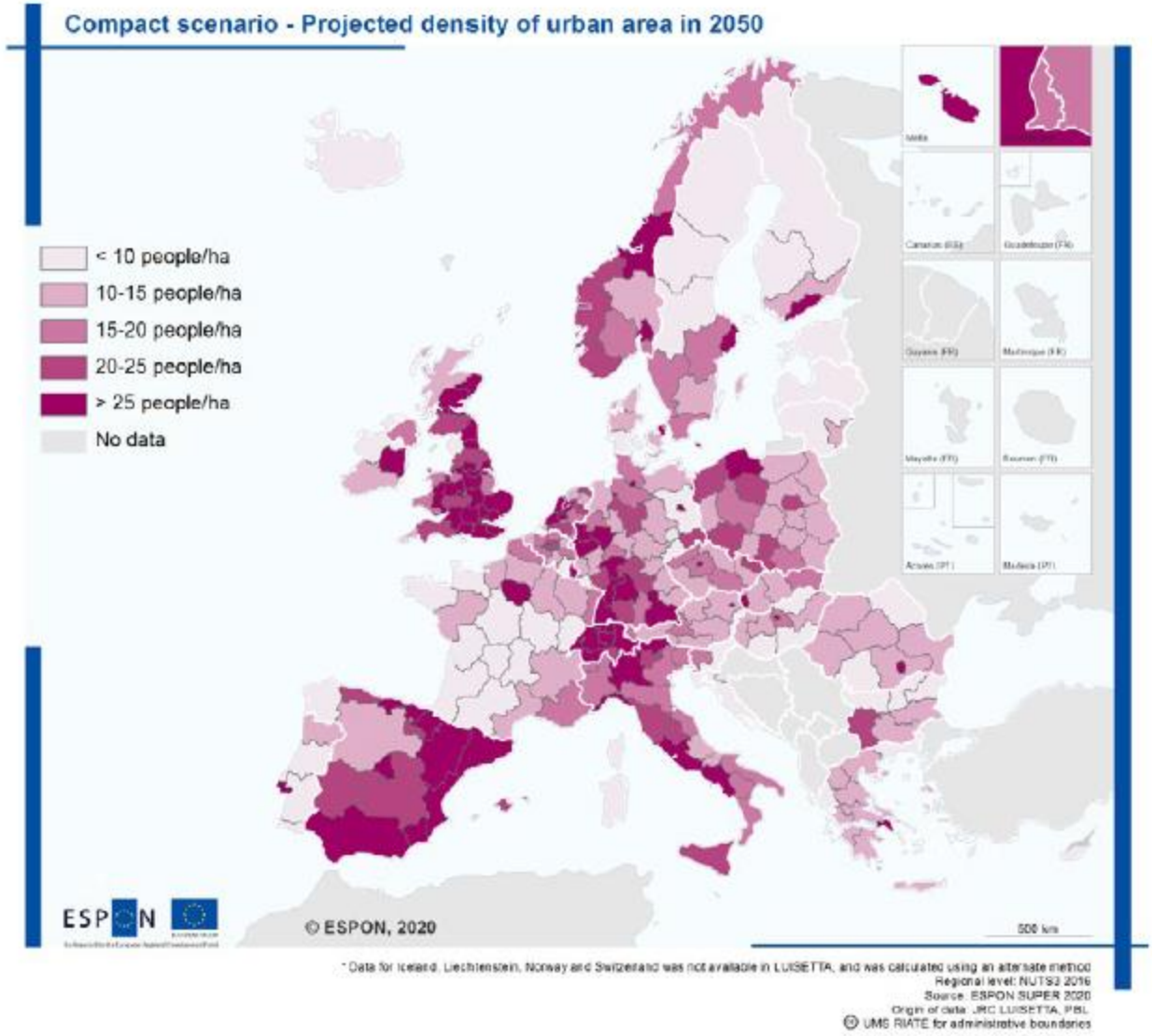


Randstad region, Netherlands

Urban growth



Population density



	Compact	Polycentric	Diffuse
Economic sustainability			
GDP, wealth	+/–*	++	+
Public finance	+ +	+	–
Jobs	+ +	++	+/ –
Accessibility	+/–	++	+/–
Business areas	++	++	+/–
Housing demand / new construction	–	+	+
Transportation costs	+/–	+	– –
Energy consumption	+	+	– –
Ecological sustainability			
Reducing mobility (by car)	+ +	+ +	– –
Reducing pollution, including CO2	+ +	+	– –
Green urban areas	–	+	–/+
Biodiversity	+/–	+/–	––
Land consumption	+	+	– –
Natural hazards – risk and vulnerability	–	+	+/–
Climate change adaptation/mitigation	+/–	+	+/–
Consumption of resources	+/–	+	–
Space for future renewable energy	+/–	+/–	+/–
Space for future water retention	+	+	+
Space for future circular economy	+	+	–
Social sustainability			
Health	+/–	+/–	+/–
Affordable housing	+/–	+/–	+ +
Equity/inclusion	+/–	+	– –
Public and recreational space	+/–	+	+/–
Variety (high–rise, suburban, etc)	+	+	+
Mixed–use areas	+	++	–
Satisfaction with home environment	+/–	+	+

* For the sake of readability, findings are presented in a synthetic way, omitting the references and averaging out the weights for each indicator (+/– usually means conflicting findings between studies).

Conclusions

- EU: united in diversity
  - Large regional differences in state and developments
  - The sustainability of urbanization is highly dependent on indicators

- Policy matters
  - Europe is a policy laboratory: everyone is dealing with urban development
  - No failsafe solution, no correlation between policy type and level of success
  - Success factors: cooperation, coordination and long-term perspective

ESPON

EUROPEAN UNION

Co-financed by the European Regional Development Fund

Inspire Policy Making with Territorial Evidence

// Thank you

David Evers, PBL/UvA (Netherlands)