

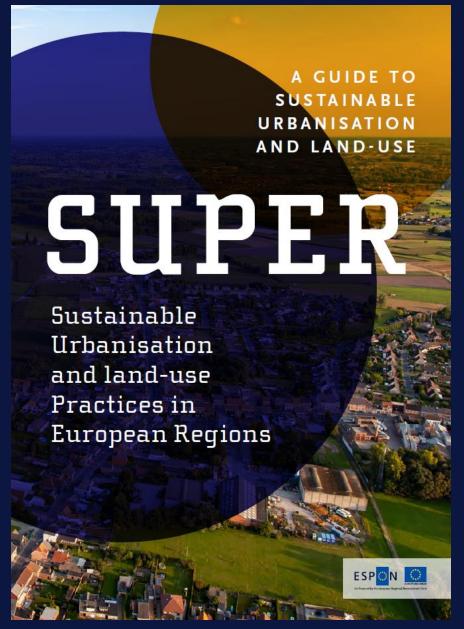
The (Un)sustainability of European Urbanization

Seminar Latvia 26 September 2025

David Evers



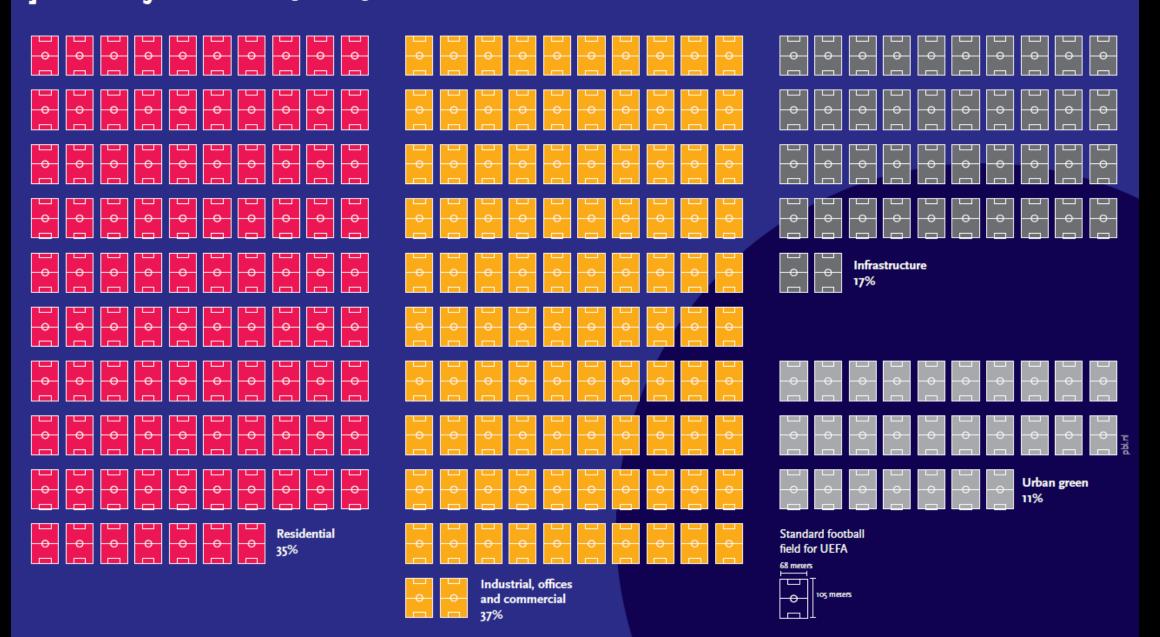
Urbanization 2000-2018



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.

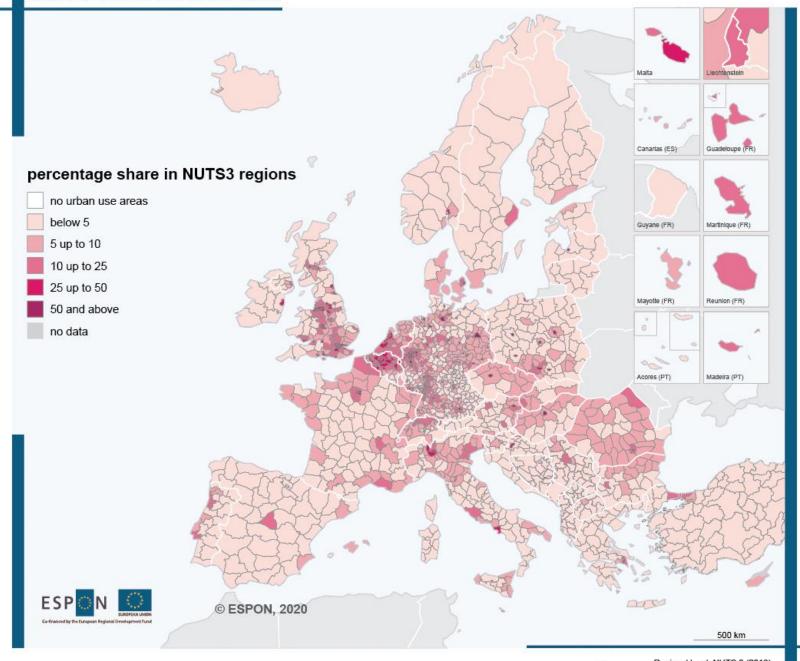


EU target: no net urbanization by 2050

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

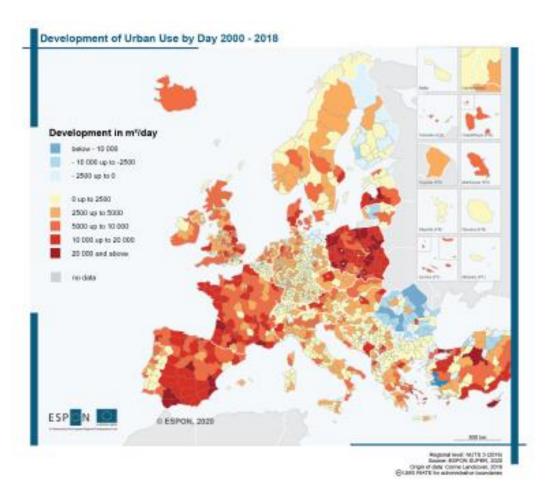
This is approximately 250 football fields per day.

8x as much land converted to urban than back

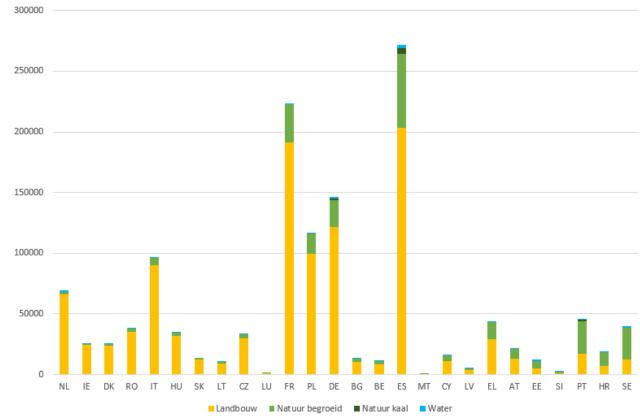


Share of urban use areas 2000

Sustainable urbanization?



Original function of land before urbanization



2012

67.354 ha

168.010 ha

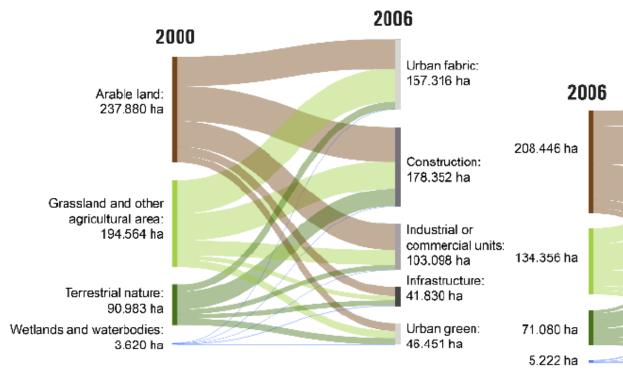
123.996 ha

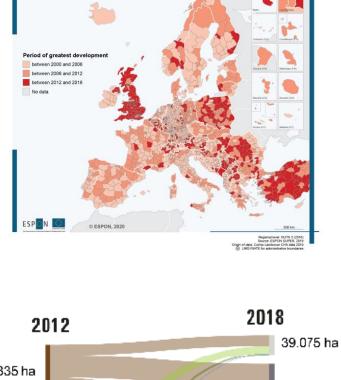
34.326 ha

25.418 ha

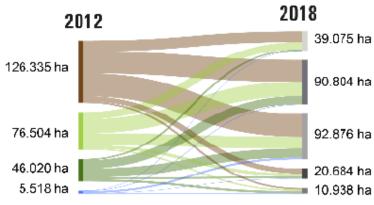
Sustainable urbanization?

Land use changes towards urbanisation at different periods in time



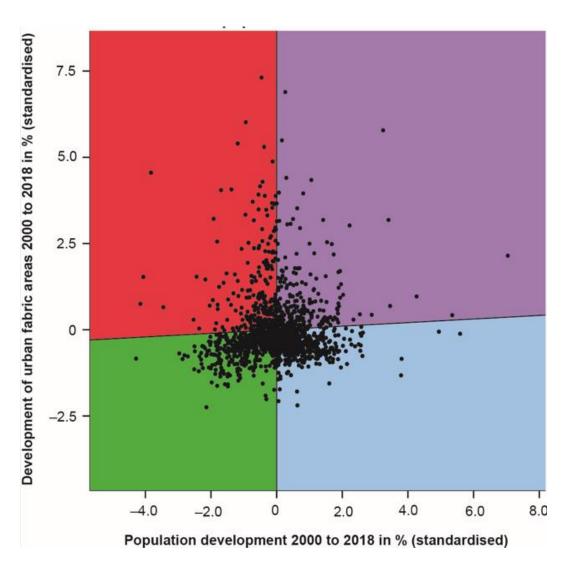


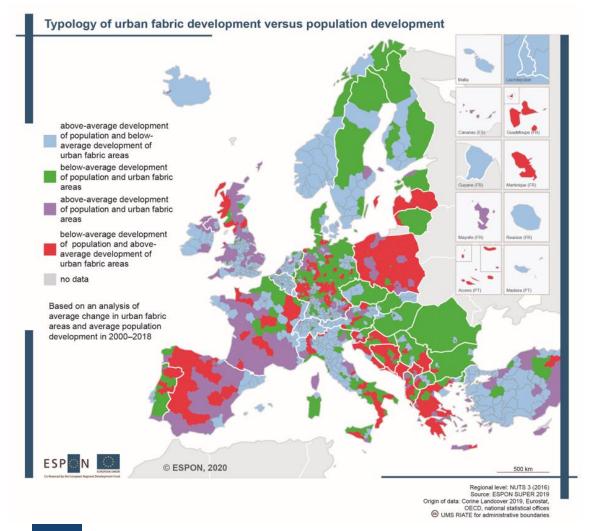
Period of greatest development of urban use 2000 to 2018



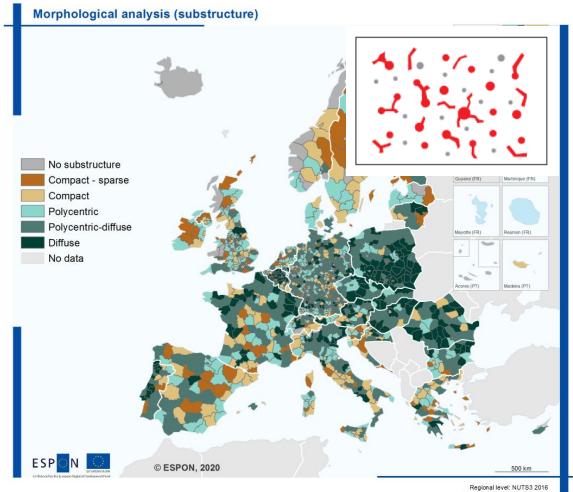


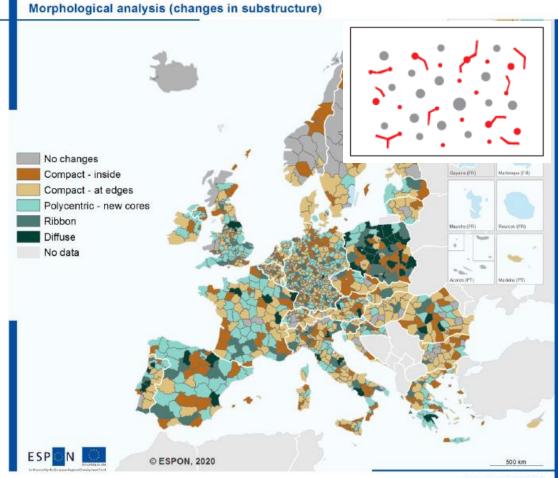
Sustainable urbanization?





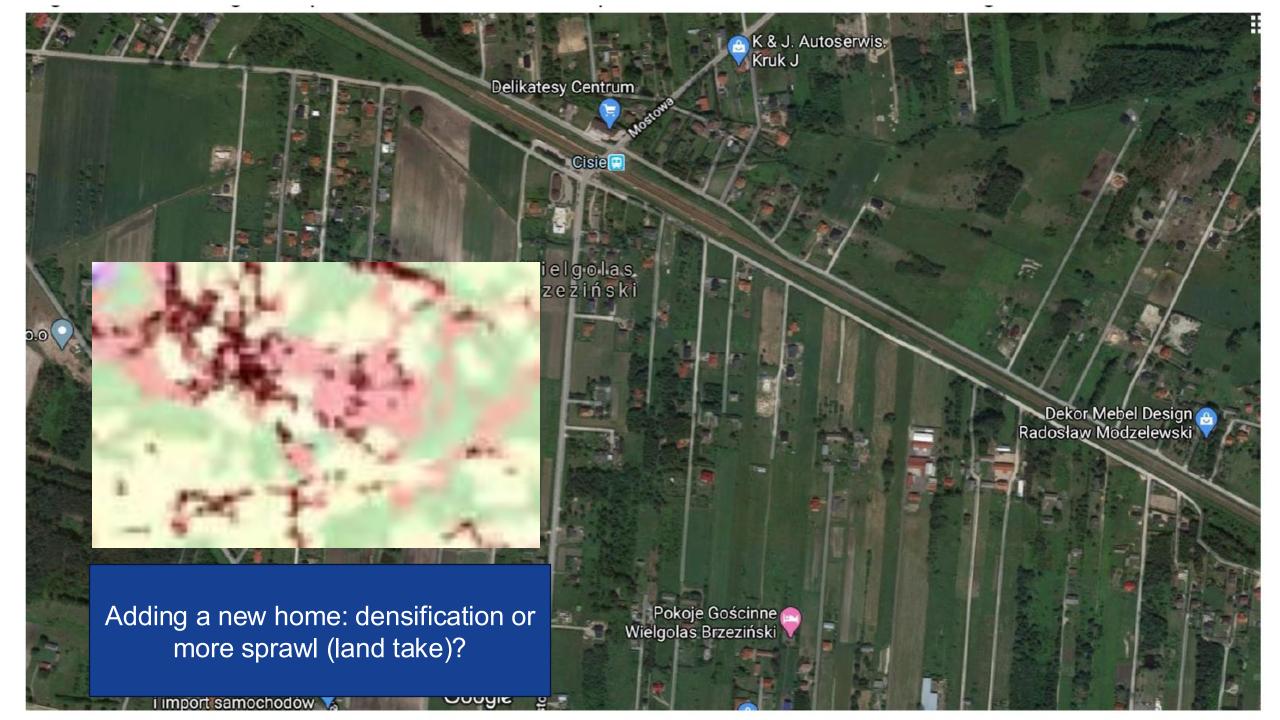
Sustainable urbanization?





Regional level: NUTS3 2016 Source: ESPON SUPER 2020 Origin of data: CLC, BBSR; 2020 © UMS RIATE for administrative boundaries



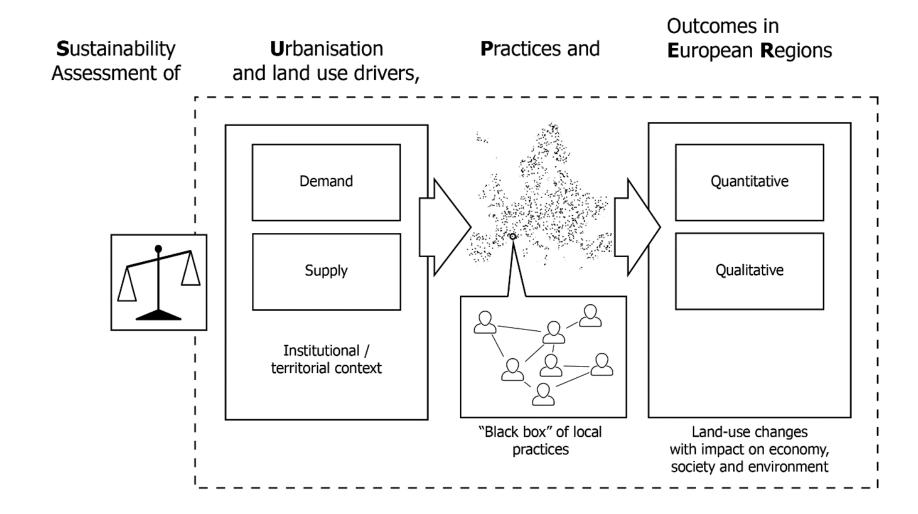




Interventions and spatial planning



Cause/effect relationship (SUPER)

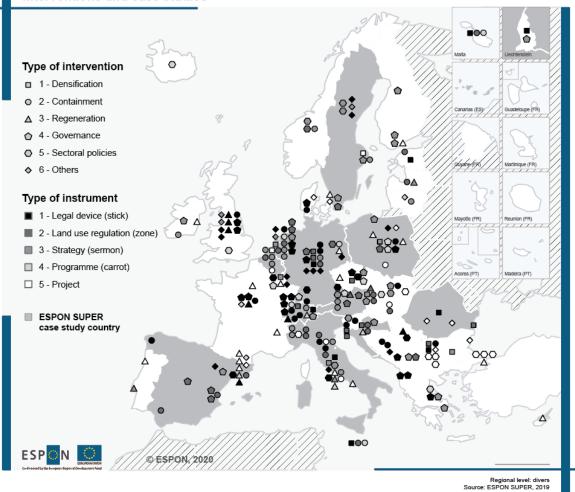


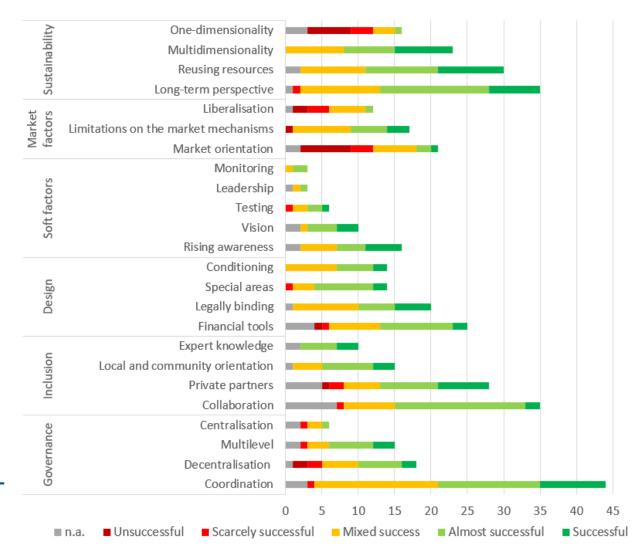
Interventions and success factors

Origin of data: Intervention database

(c) UMS RIATE for administrative boundaries

Interventions and case studies





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.

Success factors:

- combining long-term strategy objectives with short-term needs and priorities;
- promoting innovative solutions to reduce both land use and sealing share per capita.
- Incorporation of economic priorities, environmental needs and social aspects.

Success factors:

Programmes

- strong political will and the coordination of interventions:
- synergies between norms, economic incentives and monitoring;
- national long-term targets need to be linked to the local geographical, social and economic contexts.

Success factors:

- properly designed to avoid or limit side-effects and trade-offs;
- focused on few well defined specific objectives;
- activated as instruments for supporting public or private initiative to achieve strategic objectives.

Success factors

- objectives, mechanisms of implementation and instruments are coherent:
- laws have clear objectives (limit land consumption, protect valuable natural area compensations measures etc.);
- rules are normatively strict and binding

Suations

Sustainable urbanisatic

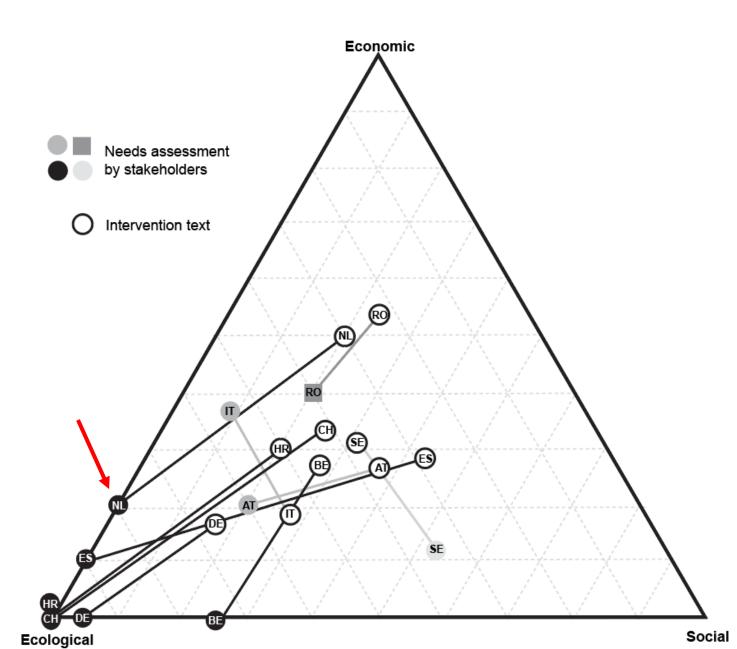
Success factors:

- · strong political will;
- effective multilevel cooperation process;
- technical capability and financial incentives.
- effective horizontal cooperation and coordination

100

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



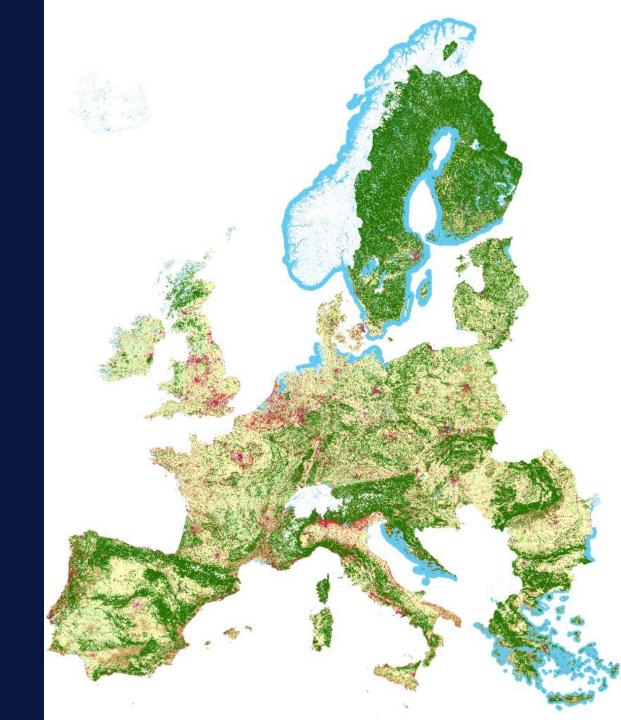
Urbanization is a social construct

Land-use development practices = Socioeconomic developments X Policy

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

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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 humanscale 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.

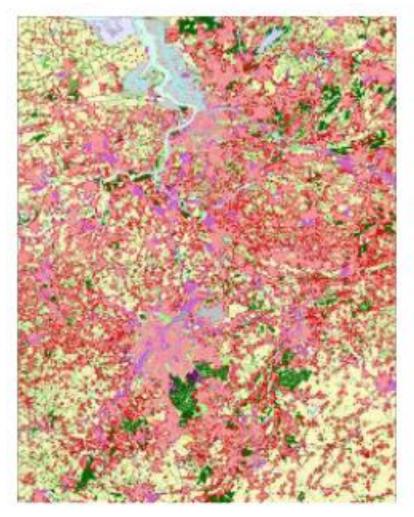
Policy package

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

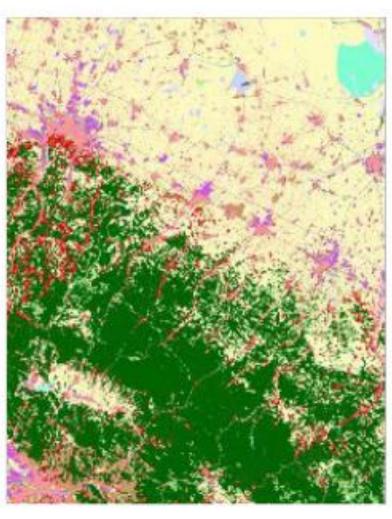


Diffuse scenario

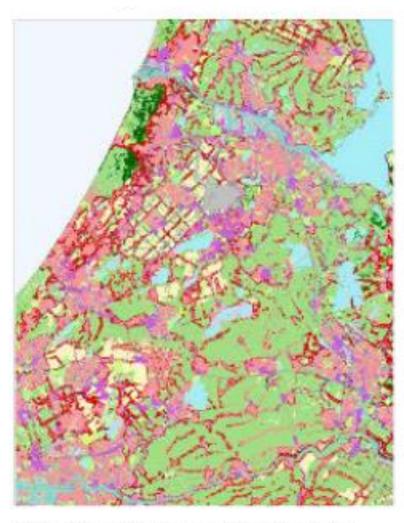




Bruxelles-Antwerp region, Belgium

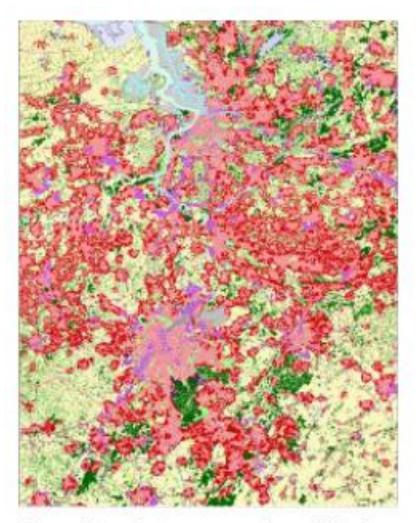


Bologna-Ravenna region, Italy

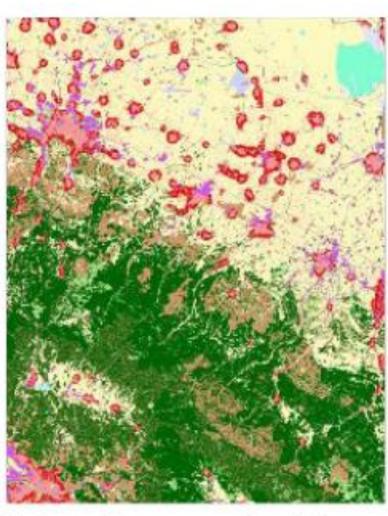


Randstad region, Netherlands

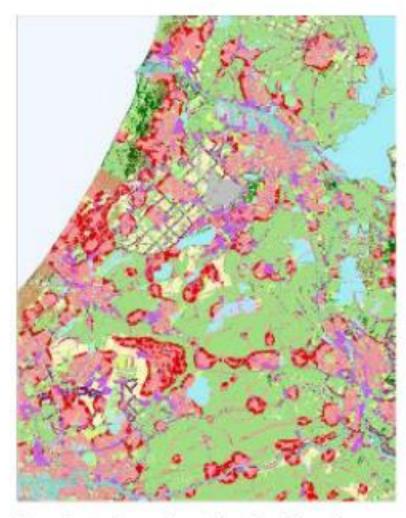
Polycentric scenario



Bruxelles-Antwerp region, Belgium

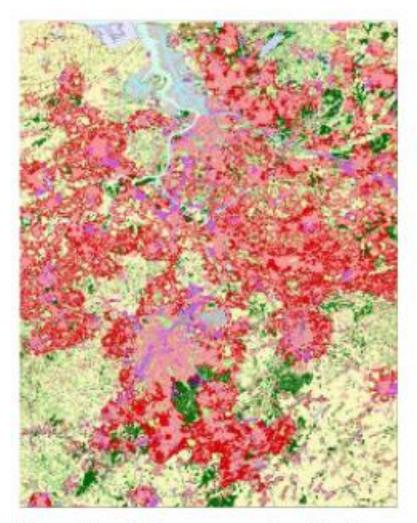


Bologna-Ravenna region, Italy

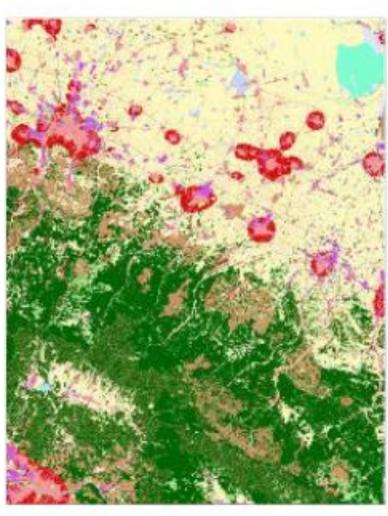


Randstad region, Netherlands

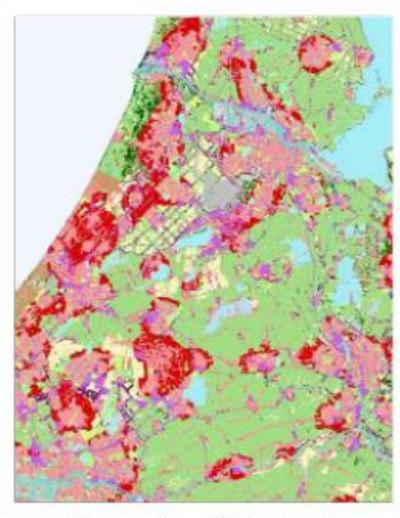
Compact scenario



Bruxelles-Antwerp region, Belgium

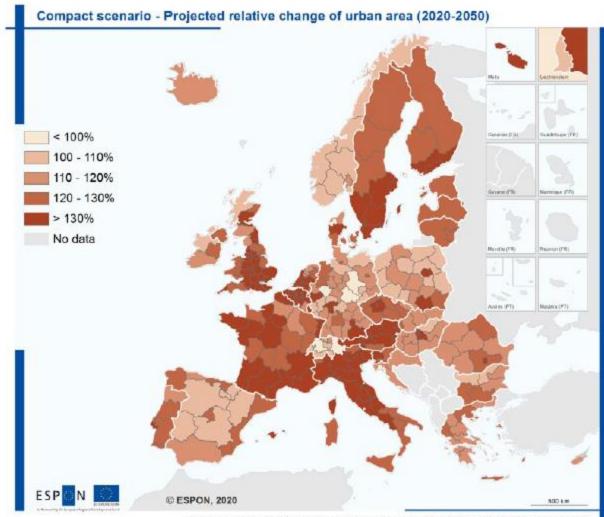


Bologna-Ravenna region, Italy



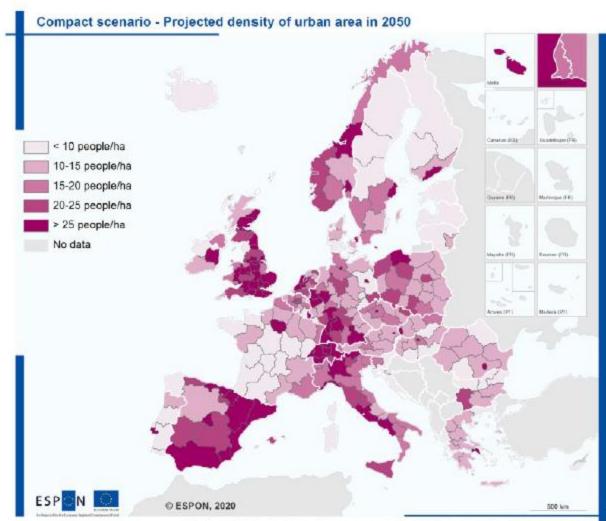
Randstad region, Netherlands

Urban growth



* Data for Ideland, Liechtenstein, Norway and Switzerland was not available in LUISETTA, and was calculated using an afternate method. Regional level. NUT33 2016 Source: ESPON SUPRES 2016 Origin of data. JRC LUISETTA, PBL SUIUS RET for administrative boundaristative or supressions.

Population density



* Data for Ideland, Liechtenstein, Norway and Switzerrand was not available in LUISETTA, and was calculated using an alternate method Regional level: NUTS3 2016 Source, ESPON SUPER 2020 Origin of onta, JRC LUISETTA, PBL

	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



Inspire Policy Making with Territorial Evidence



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