

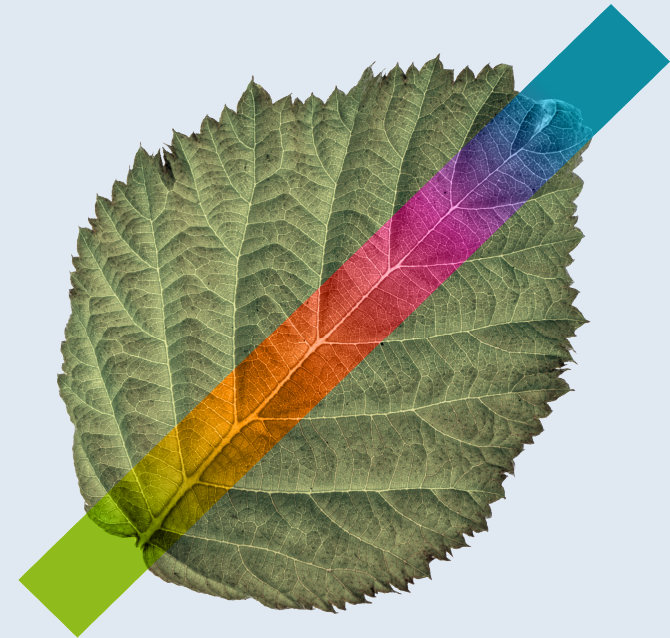
# Buone pratiche europee per il contrasto al consumo di suolo.

## Il progetto ESPON SUPER



## Giancarlo Cotella

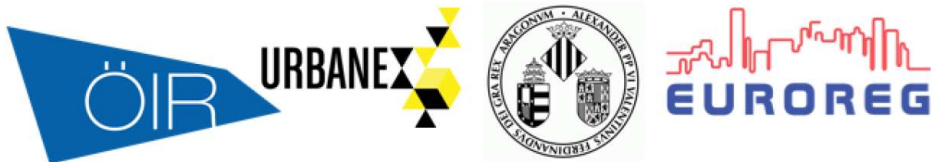
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# ESPON SUPER



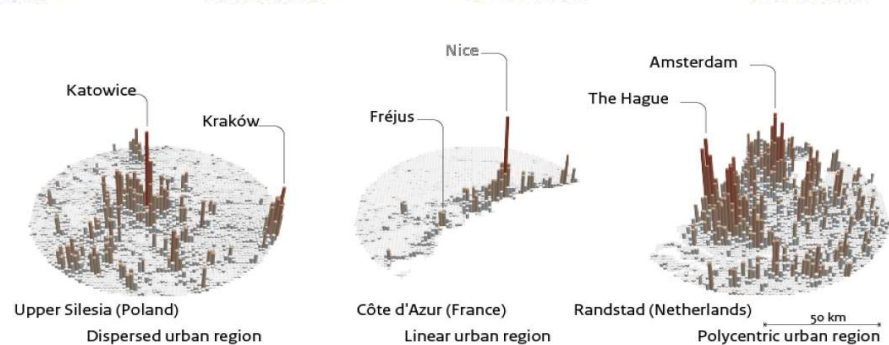
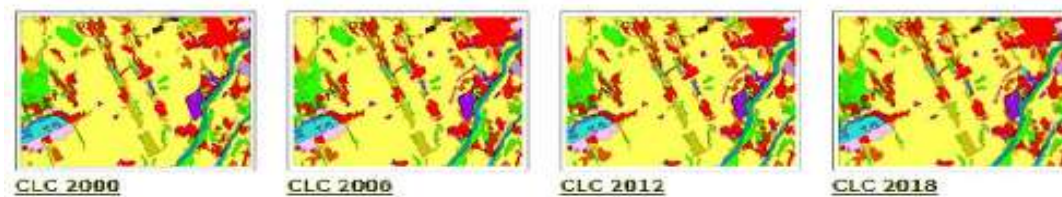
Inspire Policy Making with Territorial Evidence



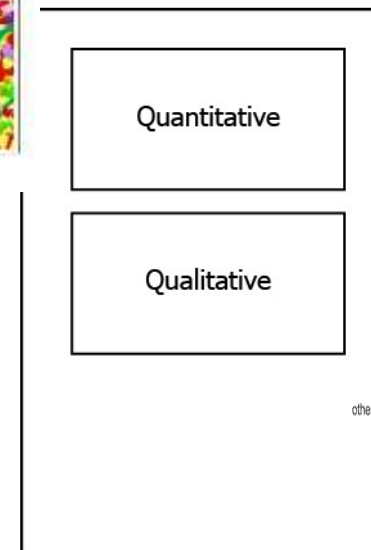
## SUPER – Sustainable urbanization and land-use practices in European regions

- **Sustainable** (Ambiente, Economia, Società, governance, prospettiva temporale)
- **Urbanization** and land use (misurazione e spiegazione dei fenomeni)
- **Practices** (obiettivi, decisioni e strumenti)
- in **European Regions** (importanza del contest, approccio regionale)

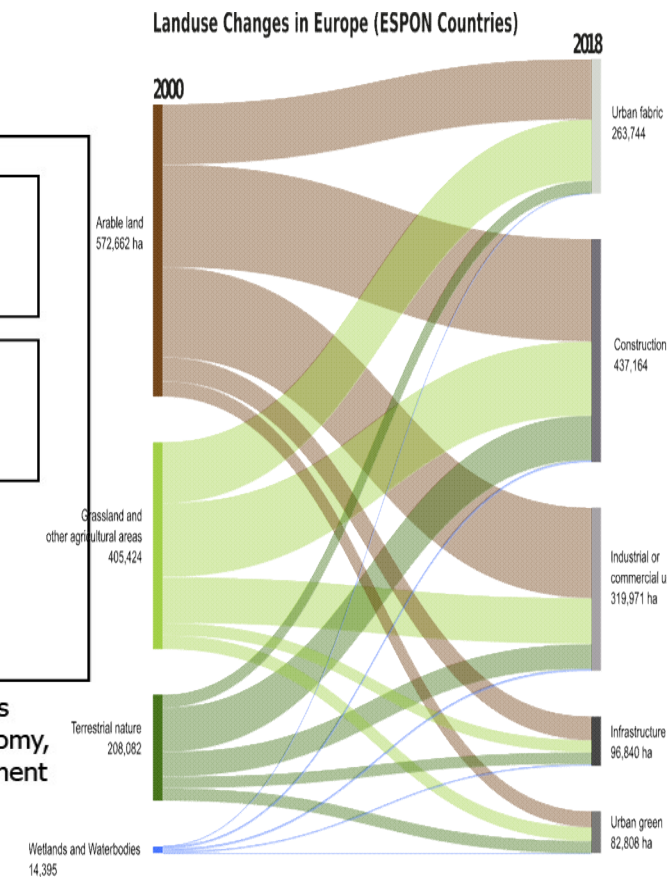
# Quadro concettuale



Regional level: NUTS 3 (2016)  
Source: ESPON SUPER, 2020  
Origin of data: Corine Landcover, 2019  
UMS RIATE for administrative boundaries



Land-use changes  
with impact on economy,  
society and environment



# Quadro concettuale

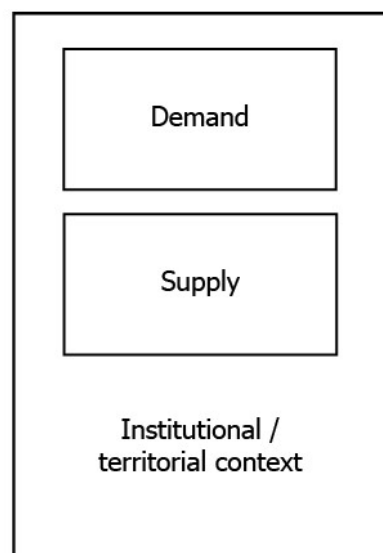
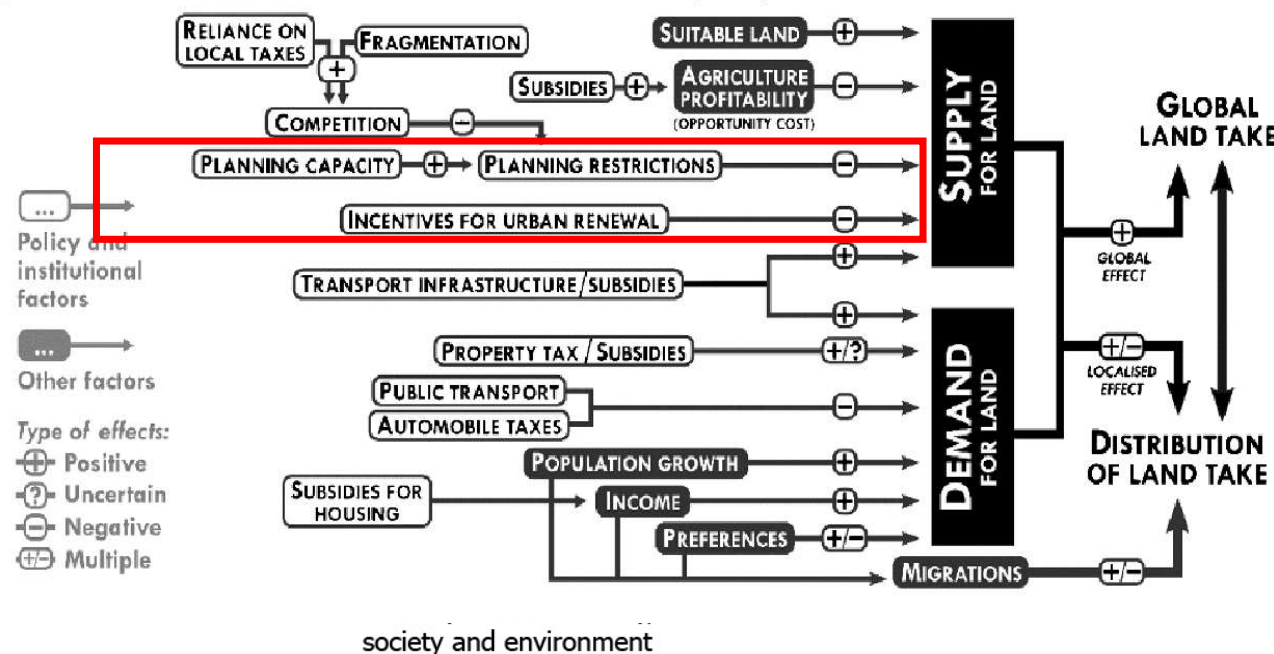
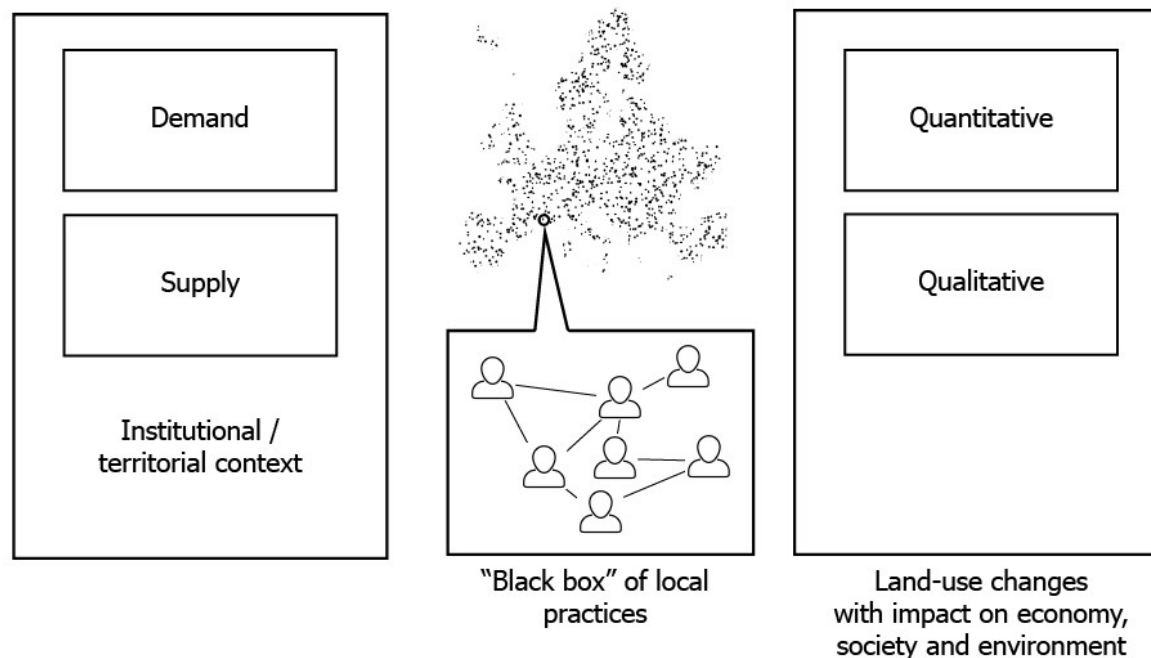


Figure 2.3 Main determinants of land take, Colsaet et al. (2018)





# Ricognizione di pratiche



# Ricognizione di pratiche

- Definizione: “tutte quelle strategie, politiche, strumenti, schemi di finanziamento etc. che mirano a orientare/regolare in qualche modo i processi di urbanizzazione e di uso del suolo”.
- Esempi: infrastrutture Verdi, rigenerazione di siti dismessi, TOD, vincoli ambientali e paesaggistici, regolamenti nazionali e locali, processi perequativi/redistributivi etc.
- Raccolta dati
  - Letteratura scientifica, progetti di ricerca e documenti di politiche
  - Questionario online + successivo approfondimento
  - Colmare contesti poco rappresentati

# Ricognizione di pratiche

235 Interventi, riguardanti tutti i  
livelli territoriali

SUPER intervention database

Type of intervention

- 1 - Densification
- 2 - Containment
- △ 3 - Regeneration
- ☆ 4 - Governance
- ⊙ 5 - Sectoral policies
- ◇ 6 - Others

Type of instrument

- 1 - Legal device (stick)
- 2 - Land use regulation (zone)
- 3 - Strategy (sermon)
- 4 - Programme (carrot)
- 5 - Project

■ ESPON SUPER  
case study country

General Information			Geographical distribution				TYPES OF EU TERRITORIES							
Name of the intervention	Year (or time frame)	Location	Scale (NUTS)	Country	Country code	URBAN	RURAL	OTHER...	Urban typology	EU inspired intervention	Type of intervention (anything that tries to impact physical urban development)	Type of instrument	statutory & mandatory; statutory & non-mandatory; non statutory & non-mandatory	
Swiss Spatial Planning Act	2013	Switzerland	NUTS - 0 (state)	Switzerland	CH	country			various		spatial quality	land use regulation	statutory	
Regeneration of part of the Taht-el-Kale Quarter	2007-2013	Nicosia	LAU 2	Cyprus	CY	X			Monocentric	X (EU funds)	Regeneration of unused/problematic sites	Urban Development	Non statutory	
Principles of Urban Policy in Czechia	2010	Czech Republic	NUTS 1 (CZ0)	Czech Republic	CZ	X			n.a.		Governance (cross-sectoral integration, integrated	Strategy (sermon)	Non statutory	
Municipal Industrial Park Borská Pole (Bory Air Fields; MIP BP); City of Plzeň, West Bohemia	1992-	City of Plzeň	LAU 2	Czech Republic	CZ	x			Monocentric		Densification, Regeneration of	Project	non-statutory	
Proof of need to zone new buildable areas	2018	Whole Czech Republic	NUTS 1 (CZ0)	Czech Republic	CZ	X			n.a.		1 - Densification (upzoning, 2 - Land use regulation (zon	Non statutory		
Protection of agricultural land	1992	Whole Czech Republic	NUTS 1 (CZ0)	Czech Republic	CZ			X	n.a.		7 - SP Environment (air, soil and water quality)	1 - Legal device (stick)	Non statutory	
Principles of territorial development of the Hradec Králové Region	n.a.	Hradec Králové Region	NUTS 3 (CZ052)	Czech Republic	CZ	X	X		n.a.		4 - Governance (cross-sector	3 - Strategy (sermon)	Non statutory	
Regional Energy Concept of the Hradec Králové Region	n.a.	Hradec Králové Region	NUTS 3 (CZ052)	Czech Republic	CZ	X	X		n.a.		7 - SP Environment (air, soil and water quality)	3 - Strategy (sermon)	Non statutory	
Strategy of integrated cooperation on Czech - Polish border	n.a.	Territory of the Novum EGTC	n.a.	Czech Republic	CZ				n.a.	X (EGTC)	4 - Governance (cross-sector	3 - Strategy (sermon)	Non statutory	
EU structural funds	2014-2020	Czech Republic	NUTS 1 (CZ0)	Czech Republic	CZ			X	n.a.	X	4 - Governance (cross-sector	3 - Strategy (sermon)	Non statutory	
National Policy of spatial development	2006	Nationwide (through the	NUTS 1 (CZ0)	Czech Republic	CZ	X			n.a.		4 - Governance (cross-sector	3 - Strategy (sermon)	Non statutory	
Zelená úsporám / Green for savings programme	since 2009	Czech Republic	NUTS - 0 (state)	Czech Republic	CZ			country	various	co-financed by EU funds	saving energy solutions	programme/subsidy	non-statutory	
30 Ha Goal	2000 -	Germany	NUTS - 0 (state)	Germany	DE	Country			various		Reduction of land use consumption	Legal device (TARGET?)	Statutory	
Berlin Program on Sustainable Development (BENE)	2015-2023	Berlin	LAU2 ex NUTS5	Germany	DE	X			Monocentric		Containment (green belts, urban growth boundaries,	Programme	non-statutory	
Transforming vacant urban areas		Berlin	LAU2 ex NUTS5	Germany	DE	X			Monocentric		Regeneration of unused/problematic sites	Urban Development Project	non-statutory	
BOKS - Soil Protection Concept	2006 - ongoing	Stuttgart	LAU2 ex NUTS5	Germany	DE	X			Policentric		SP Environment (air, soil and water quality)	Legal device (Stick)	Statutory	
eco-account system (National Nature Conservation Act)	2002	Germany	NUTS 0	Germany	DE	country			various		Compensations	legal device	Statutory	
Soil compensation account	2002	Dresden	LAU - city	Germany	DE	X			Monocentric		Compensations	legal device	Statutory	
Plan based on market tools to stop land take	n.a.	Germany	NUTS 1 (DE1)	Germany	DE	X			n.a.		2 - Containment (green belts, urban growth	Strategy (sermon)	Non statutory	
												2 - Land use regulation		



General Information						Ac
Name of the intervention	Side effect or direct impact	Description (Scope & goals)	Description (how it works)	Degree of success (1= unsuccessful; 2= scarcely successful; 3= mixed success, 4 = almost successful; 5 = successful)	Temporal sustainability: does the intervention prevent economic, social or environmental costs from being passed on to future generations?	Thematic sustainability: does the intervention advance values in the economic, social or environmental dimension without sacrificing the other dimensions?
Swiss Spatial Planning Act	direct	The objective is to address urban sprawl	The revision requires the introduction of levies, of at least 20 % of the increase of the property value, to compensate for the increases	4 - almost successful	Yes - it has a long and strategic approach	Yes-it prevent urban sprawl by guaranteeing of the preservati
Regeneration of part of the Taht-el-Kale Quarter	direct	This initiative aimed at rehabilitation/regeneration of part of Nicosia centre. The main objects is to upgrade the physical and	Although it consists mainly of rehabilitation works (public spaces, roads and facades), the project's relation to the theme results from	3 - mixed success (scarce level of public	Yes - it helps the municipality to the rehabilitation of part of	Yes - it reduces social inequalities in city centre by
Principles of Urban Policy in Czechia	Direct	The Czech Ministry of Regional Development produced the Principles of Urban Policy in 2010. It is a framework document that	Principles of Urban Policy is a framework document which coordinates the approach taken by all levels of government to	n.a.	Yes, it promotes sustainable measures	Economic, social and environmental
Municipal Industrial Park Borská Pole (Bory Air Fields; MIP BP); City of Plzeň, West Bohemia	indirect	Two major goals were pursued: (1) to enable and stimulate restructuring of an industrial base of the city (and consequently	Early 1990s: former air field identified as a potential development area, alternatively as a potential burden for the city because of its	5 - The objectives were fully achieved. The	YES - the project is old enough to see its sustainability over	YES - focused on economy but other areas weren't sacrificed
Proof of need to zone new buildable areas	Direct	When zoning new buildable land, the need for new land (and formerly impossibility to use currently zoned buildable land)	On 1 January 2018, the long-awaited Act No. 225/2017 Coll., amending the Building Act (i.e. Act No. 183/2006 Coll., on town	3 (mixed results): it partly helps.	Yes, it promotes present environmental protection and	Economic, social and environmental
Protection of agricultural land	Direct	The soil protection law No. 334/1992 Coll., which defines five classes of soil protection.	According to the law, first and second best quality of soil out of 5 quality categories can be used for building only if other public	4 (mixed results): it partly helps.	Yes, it promotes soil protection	Environmental
Principles of territorial development of the Hradec Králové Region	Direct	The Principles of Territorial Development (ZÚR) of the Hradec Králové Region define territorial planning principles and are	Territorial development principles define the future use of areas or corridors of interest (e.g. territorial reserves) or those highlighted	n.a.	Yes, it promotes present environmental protection and	Economic, social and environmental
Regional Energy Concept of the Hradec Králové Region	Direct	The Concept evaluates the usability of renewable and non-traditional energy sources (biomass, biogas, use of solar energy,	n.a.	n.a.	Yes, it promotes the use of renewable and non-traditional	Environmental
Strategy of integrated cooperation on Czech - Polish border	Direct	The Strategy aims to enhance cross-border cooperation between the Czech-Polish border. The EGTC, an European legal instrument,	The cross-border Strategy is co-financed by the European Union from the European Regional Development Fund under the INTERREG	n.a.	n.a.	Economic, social and environmental
EU structural funds	Direct	The Structural Funds are financial tools set up to implement the regional policy of the European Union. They aim to reduce regional	Support for development of transportation infrastructure, environmental investment (treatment plants, anti-flood devices),	4 (success): yes, it has become essential for	Yes, it promotes sustainable development	Economic, social and environmental
National Policy of spatial development	Direct	The National Policy of Spatial Development was established in 2006 but it took quite a long time before it became effective. The	The Spatial Development policy respects the Sustainable Development Strategy, the Economic Growth Strategy, and the	3 (mixed results)	Yes, it promotes present environmental protection and	Economic, social and environmental
Zelená úsporám / Green for savings programme	indirect	The main objective of the programme is to improve the state of the environment by reducing the production of pollutant and	The original Green Savings programme achieved substantial emission reduction estimated at about 710 kilotonnes CO2 per year.	5 - successful	Yes	yes
30 Ha Goal	direct	The target is to reduce land take (annual land consuption) to 30 ha daily for 2020 instead of 130 of 2000. In 2011 the average	to pursue the 30ha target, two instruments have been launched: Land Take Reduction Action Plan & Pilot scheme in land certificate	4 - despite achieving the 30ha (for 2020) seems to be	YES - it is a future-oriented target in coherence to the SDGs	YES - its seeks to reduce the human footprint in favour of
Berlin Program on Sustainable Development (BENE)	indirect	Enhancing the quality of urban spaces focuses on areas of the city with a higher concentration of social problems (e.g. poverty,	The BENE programme financed a series of projects and initiative aming at improving the quality of life in Berlin.	successful - ongoing process	YES	YES
Transforming vacant urban areas	direct	Reconversion of centrally located areas in Berlin	Diversification of land uses for abandoned areas in the centre of Berlin. A stated-own company - Grün Berlin GmbH, is responsible	5 - this approach has involved the riconversion	YES - it is very strategi-oriented vision	YES - it allows the city to increa green public space surface for
BOKS - Soil Protection Concept	direct	Reduce soil consuption and enhance its quality	It promotes two different approaches: (i) First approach "inner urban development" concentrates on brownfield redevelopment.			
eco-account system (National Nature Conservation Act)	indirect	Eco-account system is a compensation measure. Eco-points can be acquired at compensation agencies, which are officially	The eco-account system represents added value for compensation measures: (1) the quality of measures is better controlled; (2)			
Soil compensation account	direct	The objective is to confine built-up land for settlements and traffic to 40 % of	New developments on undeveloped land require adequate (de)sealing measures or "greening" measures somewhere else but	Mixed - the measure is effective but is regarded as	YES - long-term planning target	YES - it prevents unsustainable use of soil and furthermore it
Plan based on market tools to stop land take	Direct	Market-based instruments and neoliberal approaches to reduce land take and promote containment.	n.a.	n.a.	n.a.	n.a.
Regional planning	Direct	All German regions are obliged to provide a strict planning regime by setting up regional plans that regulate land consuption	Regional Plans are created for so-called planning regions, each of which covers typically between 10% and 30% of a state. They are the central instrument for coordination between the top down planning of the federal and state level and	n.a. More or less, depending on the regions	Yes, it promotes present environmental protection and	Economic, social and environmental
Green belts and comparable regional concepts of green area	n.a.	Conceptual framing of green infrastructure by visions and	Regions and intercommunal cooperation. Good examples: Stuttgart	n.a. Depending on the		

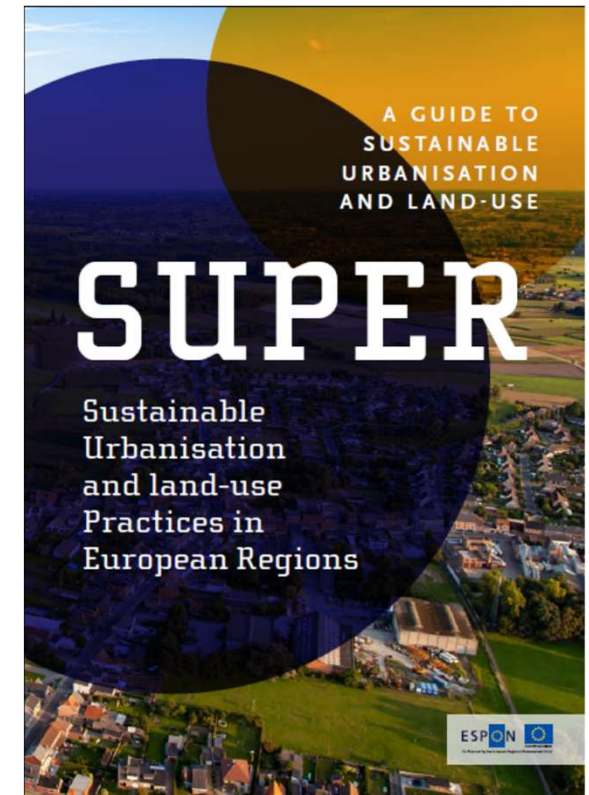
# Ricognizione di pratiche

**A guide to sustainable urbanisation  
and land use**

<https://www.espon.eu/super>

**Database degli interventi:**

[https://www.espon.eu/sites/default/files/attachments/ESPON%20SUPER%20Final%20Report%20Annex%202a%20-%20Intervention%20Database Final 0.xlsx](https://www.espon.eu/sites/default/files/attachments/ESPON%20SUPER%20Final%20Report%20Annex%202a%20-%20Intervention%20Database%20Final%200.xlsx)





# Ricognizione di pratiche. Esempi

## Densificazione

- Malta: garantire il permesso di costruire piani ulteriori, in deroga agli strumenti di piano vigenti
- Lussemburgo: Piano nazionale di riempimento delle aree urbane vacanti, che identifica esplicitamente le aree edificabili e introduce condizioni favorevoli per la loro urbanizzazione.

## Contenimento

- Andalusia: introduzione di limiti di urbanizzazione per le municipalità medie e grandi
- Bassa Austria: Dashboard che consente di calcolare il costo degli interventi infrastrutturali e l'effettivo ricavo pubblico legato alle nuove urbanizzazioni
- Danimarca: limitazioni alla costruzione di centri commerciali su aree naturali o agricole, o comunque al di fuori delle zone dense

BOX 6

## Municipal Structural Plan of the Union of Municipalities of Bassa Romagna (IT)

**Name of the intervention, location and country:**  
Municipal Structural Plan of the Union of Municipalities  
of Bassa Romagna, Emilia Romagna (Italy)

**Territorial level:** LAU1; Year: 2009

**Website link:** [http://www.labassaromagna.it/  
Guida-ai-Servizi/Urbanistica/  
Piano-Strutturale-Comunale-PSC](http://www.labassaromagna.it/Guida-ai-Servizi/Urbanistica/Piano-Strutturale-Comunale-PSC)

**See also:** ESPON SUPER, Final Report,  
Annex 3.8\_IT. Available at:  
<https://www.espon.eu/super>



Urban Green Park, Sant'Agata Sul Santerno – Italy

**Territorial characteristics of the area:**

The Union of Bassa Romagna consists of nine municipalities that share common territorial and economic challenges. It is an area characterised by intense development pressures and rampant urbanisation.

**Intervention goal and main features**

The Union's Municipal Structural Plan is a strategic instrument aiming at improving spatial planning by promoting future-oriented, integrated, sustainable and effective spatial planning activities. For more than 10 years, this plan has defined the main spatial trajectory and territorial development perspectives of the Union of Bassa Romagna.

BOX 7

## Revision of the spatial planning law in Canton Aargau (CH)

**Name of the intervention, location and country:**  
Revision of the Spatial Planning Law, Canton of Aargau  
(Switzerland)

**Territorial level:** NUTS3; Year: 2014

**Website Link:** [https://www.uvek.admin.ch/uvek/  
de/home/uvek/abstimmungen/abstimmung-  
raumplanungsgesetz.html](https://www.uvek.admin.ch/uvek/de/home/uvek/abstimmungen/abstimmung-raumplanungsgesetz.html)  
[https://www.ag.ch/de/bvu/  
raumentwicklung/raumentwicklung.jsp](https://www.ag.ch/de/bvu/raumentwicklung/raumentwicklung.jsp)

**See also:** ESPON SUPER, Final Report,  
Annex 3.4\_CH. Available at:  
<https://www.espon.eu/super>



Revision of the spatial planning law in Switzerland  
(focus on Canton Aargau)  
Source: Schweizer Luftwaffe (2011)

**Territorial characteristics of the area:**

Since the 1960s, the living space per person in Switzerland has doubled to around 50 m<sup>2</sup>. Before the intervention, there were calls for a coordinated federal response to limit urbanisation.

**Intervention goal and main features:**

The Case concerns the revision of the Swiss Spatial Planning Law and the implications of this for the Canton of Aargau. Its aim is to control urbanisation by promoting compact settlement development. It mandates that building zones that are too large should be reduced in size and that existing reserves should be used more efficiently. In a referendum on 3 March 2013, the revision was approved with 63% of the votes.



BOX 4

## Protected Coastal Area in Croatia (HR)

### Name of the intervention, location and country:

Protected Coastal Area within the Physical Planning Act  
in Croatia (Croatia)

**Territorial level:** NUTS0; **Year:** 2004 (last reform in 2013)

**Website link:** [https://mgipu.gov.hr/  
access-to-information/regulations-126/regulations-in-  
the-field-of-physical-planning-8641/8641](https://mgipu.gov.hr/access-to-information/regulations-126/regulations-in-the-field-of-physical-planning-8641/8641)

**See also:** ESPON SUPER, Final Report,  
Annex 3.7\_HR. Available at:  
<https://www.espon.eu/super>



Preservation of traditional agriculture on the Croatian coast

### Territorial characteristics of the area:

The Croatian coastal area has seen a great increase in (often illegally built) secondary housing since the end of the 1970s. This has caused a decrease in traditional agricultural production. Today, the significant pressures on the coastal environment are caused by urbanisation, tourism and traffic.

### Intervention goal and main features

The Physical Planning Act defines a Protected Coastal Area which is subject to restriction on building other spatial interventions.

### INFOGRAPHIC 8

## Toolbox of instruments for sustainable urbanisation

**Success factors:**

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

**Success factors:**

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



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

**Success factors:**

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

Rules and  
legal  
devices

La  
regulation

*Visions  
and  
strategies*

**Success factors:**

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

**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.

*Programmes*



### 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.

Rules

Projects



# In conclusione...

Gli obiettivi generali (e.g. la riduzione a zero del consumo di suolo netto in Europa entro il 2050) hanno da soli valore limitato, soprattutto a causa della diversità dei trend socioeconomici e ambientali che caratterizzano il continente Europeo.

Allo stesso tempo, l'intervento pubblico può influenzare i processi di urbanizzazione e di uso del suolo. Anche se non sempre è in grado di modificare i macro-trends che generano la domanda di suolo, può influenzarne le logiche di localizzazione (alcune configurazioni o combinazioni di uso del suolo sono più sostenibili di altre).

Le autorità pubbliche locali dovrebbero assumere un ruolo guida nella definizione di obiettivi a lungo termine (e.g. strategie e visioni chiare e esplicite), da utilizzare come quadro di riferimento per un sistema di interventi operativi.

Non esiste una matrice da seguire per impostare tale sistema di interventi (no one-size-fits-all approach), e ogni contesto dovrebbe 'cucire' la propria azione in base alle caratteristiche e necessità territoriali, potendo però prendere ispirazione da un ricco abaco di buone pratiche e avvertimenti.



// Grazie per l'attenzione!

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