

Don't call it 'land take' or 'sprawl'!

Introducing new ESPON research on changing land-use in European Regions, its sustainability and how it can be influenced by policy.

David Evers – PBL / ECP
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Land take

EEA: “the amount of agricultural, forest and other semi-natural and natural land taken by urban and other artificial land development. It includes areas sealed by construction and urban infrastructure, as well as urban green areas, and sport and leisure facilities.”

Approximately 1000 ha/day (EC 2014)

Normative aspect: ‘taken’ (illegal? by whom?)

Operationalisation in policy: no net land-take by 2050

Urban sprawl

Sprawl (v): "to cause to spread out carelessly or awkwardly" (Merriam-Webster)

Term 'urban sprawl' North American in origin

Normative/pejorative connotation

Contested definitions and indicators

EEA – focus on drivers (*Urban Sprawl in Europe*, 2016)

OECD – focus on morphology (*Rethinking Urban Sprawl*, 2018)

Hayden – focus on appearance (*A field Guide to Sprawl*, 2004).



EUROPEAN UNION

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Inspire Policy Making with Territorial Evidence

// Sustainable Urbanisation and land-use Practices in European Regions (SUPER)

“The service shall provide evidence, recommendations and measures on how sustainable land use can be promoted and how land-take and urban sprawl can be avoided, reduced and compensated in Europe, its cities and regions”



PBL Netherlands Environmental
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Bundesinstitut
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im Bundesamt für Bauwesen
und Raumordnung



**POLITECNICO
DI TORINO**



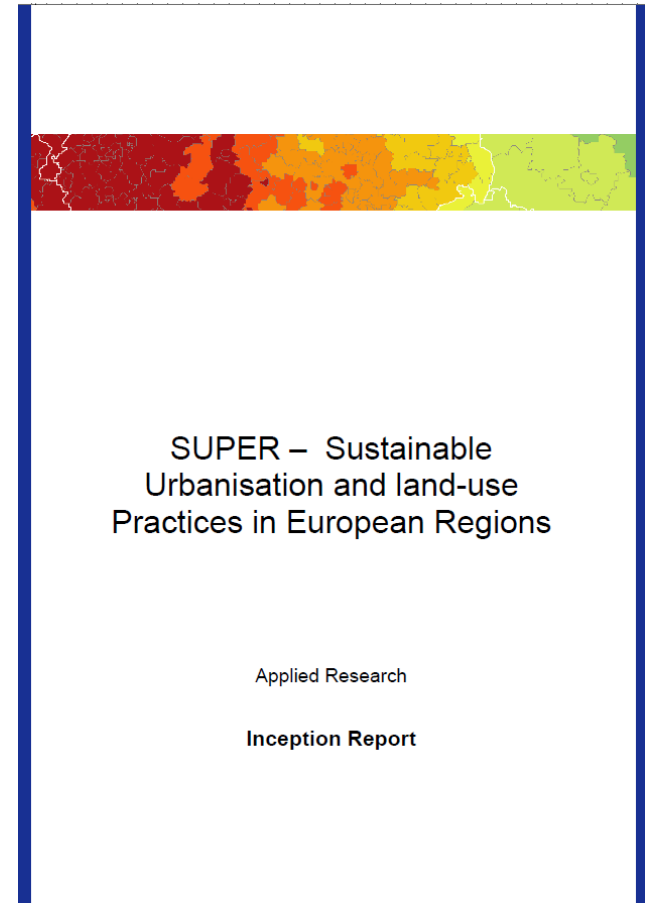
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SUPER terminology

- **Sustainable** (temporal balance vs thematic balance)
- **Urbanization** and land use (understanding drivers of change)
- **Practices** (land-use decision-making, effectiveness of planning)
- in **European Regions** (territory matters, regional approach)



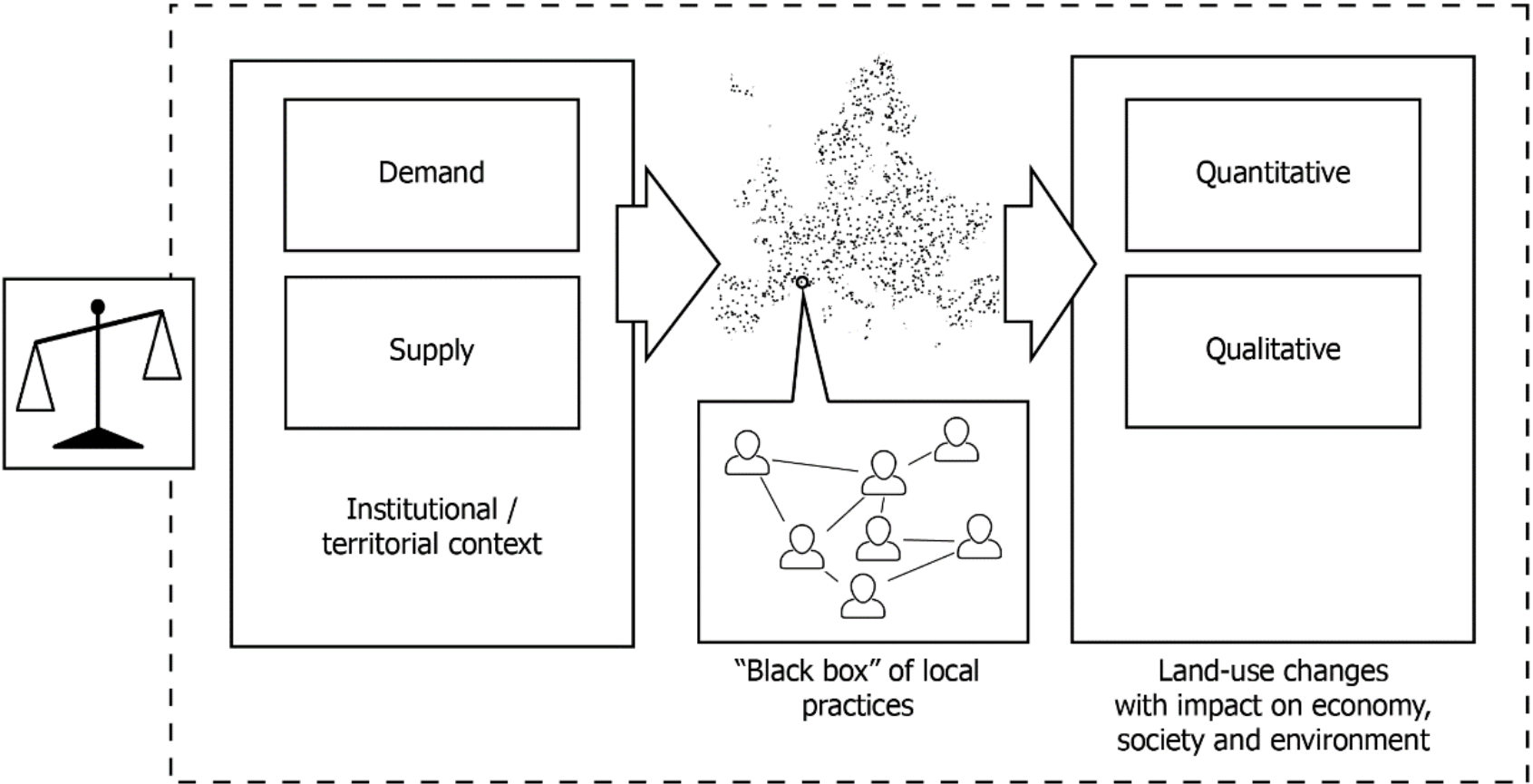
SUPER conceptual framework

Sustainability
Assessment of

Urbanisation
and land use drivers,

Practices and

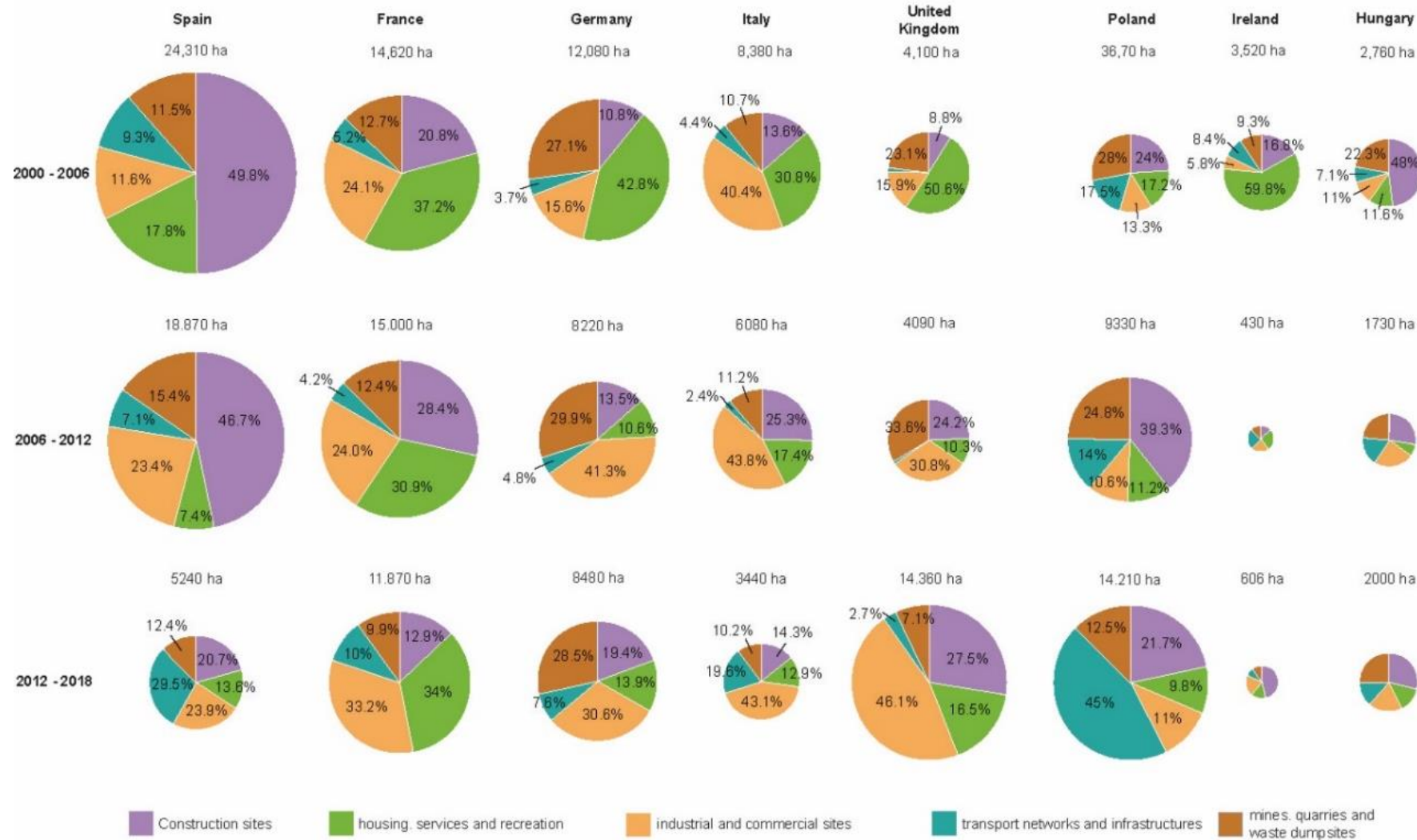
Outcomes in
European Regions



Survey of land-use change

- A detailed quantitative analysis of European land-use change, e.g. with Corine data
- Zoom in on urbanization hotspots, inductive typology creation

Survey of land-use change



Survey of land-use change



Interventions

- Definition: all policies, strategies, subsidy schemes, etc. that guide, or attempt to guide, urbanization and land use.
- Examples: green infrastructure, sustainable urbanization ladder, brownfield regeneration funds.
- Data: ESPON Compass (TU-Delft), online survey
- Grouping of interventions into types
- Assessment: what works?

Analysis of land-use developments

- Scenarios
 - Sprawl/BAU
 - No net LT 2050
- Land allocation model: Luisetta
 - Developed by JRC
 - Scenarios in Barbosa et al. (2017)

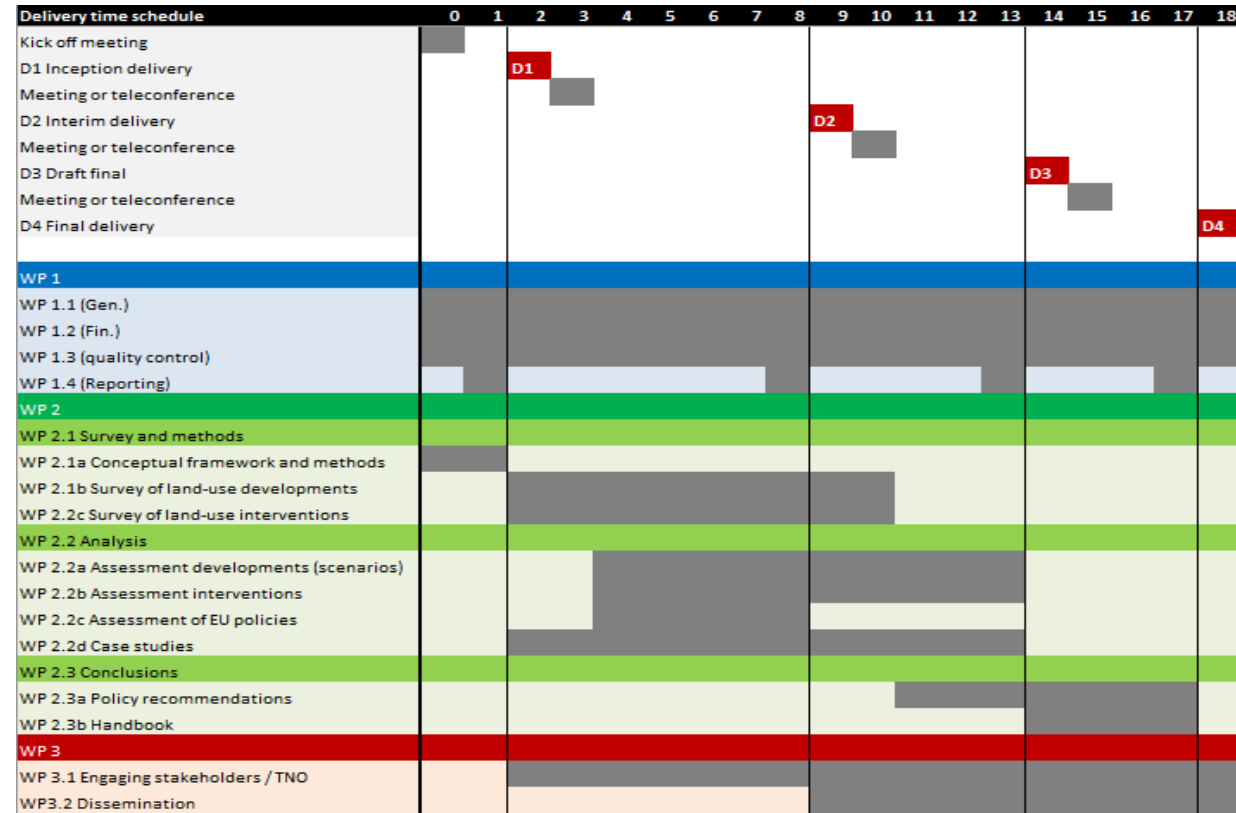
Case studies: 10 (under selection)

Substantive aspects	
<p>To what extent can the observed land-use changes in the case be considered sustainable?</p> <ul style="list-style-type: none"> To what extent did short-term thinking weigh up against concerns of long-term economic, ecological and social vitality? To what extent were trade-offs avoided between economic, ecological and social values (e.g. urban green spaces in densifying areas)? <p>Was there a tension between sustainability at different levels of scale (e.g. a locally sustainable development having unsustainable attributes at the regional level)?</p> <p>To what extent is there a correlation between urban form (e.g. high-density contiguous urbanisation versus low-density scattered development) and sustainability?</p>	
Instrumental aspects	
<p>How much impact did various interventions have in producing sustainable urbanisation and land-use outcomes?</p> <ul style="list-style-type: none"> To what extent were place-based approaches and territorial cooperation responsible? To what extent were financial, fiscal and economic mechanisms responsible? <p>How sustainable are the measures themselves over time?</p> <ul style="list-style-type: none"> Do they produce economic benefits? To what extent do they effectively internalize external costs? To what extent do they enjoy popular support or consensus among stakeholders? 	

Code	Case	Country	Scale	Urban typology	Land use	Land use intensity	Urban form	Urban form intensity	Urban form sustainability	Urban form sustainability	Urban form sustainability
001	Urban growth boundary (UGB) in Los Angeles	USA	Local	Metropolitan	Urban	High density	Program	High density development with green field specifications	Ecological	Sustainable	
002	Comprehensive plan 'Hedberg'	USA	Regional	Metropolitan	Urban	High density	Comprehensive	Based on a high density, intensive	Ecological	Sustainable	
003	Regional Land Use Policy	USA	Regional	Metropolitan	Urban	High density	Comprehensive	The Plan provides the development of sustainable	Ecological	Sustainable	
004	Urban form and management for application	USA	Regional	Metropolitan	Urban	High density	Program	Urban form and management	Social	Miscellaneous	
005	Plan 2030 (San Jose)	USA	Local	Urban	High density	Program	Urban form and management	Urban form and management			
006	'Urban form' (New York)	USA	Regional	Metropolitan	Urban	High density	Comprehensive	Urban form and management	Economic	Sustainable	
007	Metropolitan Comprehensive plan for the region of Salzburg	Austria	Regional	Metropolitan	Urban	High density	Comprehensive	Urban form and management	Social	Miscellaneous	
008	Urban form plan for the region of Salzburg	Austria	Local	Urban	High density	Program	Urban form and management	Urban form and management			
009	Urban form plan for the region of Salzburg	Austria	Local	Urban	High density	Program	Urban form and management	Urban form and management			
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Outputs

- State-of-the-art evidence on urbanization and land-use developments in Europe
- State-of-the-art evidence on urbanization and land-use interventions in Europe
- Calculation of policy scenarios using state-of-the-art land-use modelling, case studies
- Recommendations and handbook on sustainable urbanization and land use



// Thank you

David Evers, PBL/ECP

This presentation will be made available at: www.espon.eu