



Bodenschutz und Energiewende – Ein europäisches Thema?

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The Soil Thematic strategy, COM(2006) 231

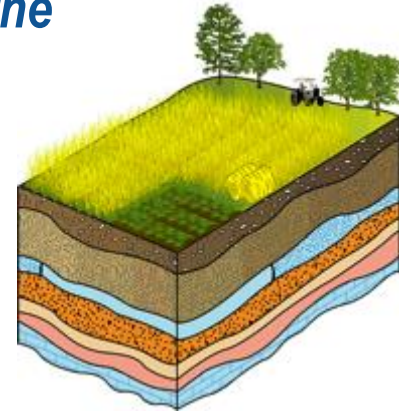
- ❖ Overall objective is the protection of **soil functions** and **sustainable use** of soil, based on the following guiding principles:
 - ❖ Prevention of soil degradation
 - ❖ Restoration of degraded soils
- ❖ Sets out the **four pillars** of EU soil policy
- ❖ To be implemented by MS
- ❖ 2012 Report from the Commission on the implementation of the STS COM(2012)46



Soils deliver multiple services (soil functions as identified in the Soil Thematic Strategy COM(2006) 231):

- 1. Biomass production, including in agriculture and forestry;*
- 2. Storing, filtering and transforming nutrients, substances and water;*
- 3. Biodiversity pool, such as habitats, species and genes;*
- 4. Physical and cultural environment for humans and human activities;*
- 5. Source of raw materials;*
- 6. Acting as carbon pool;*
- 7. Archive of geological and archeological heritage.*

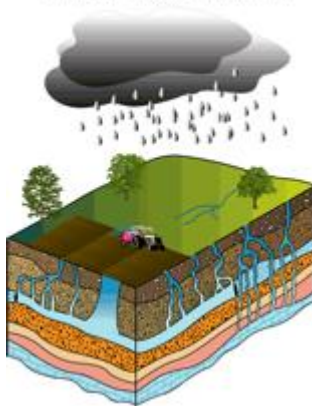
Basis for biomass production



Habitat and gene reservoir



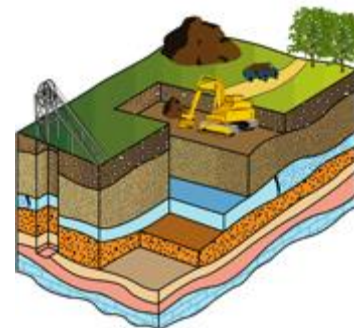
Filtering, buffering and transformation



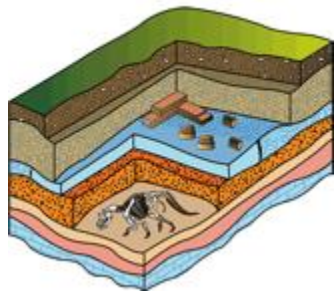
Foundation for Buildings



Source of raw materials



Historical medium



Objective: Protection of soil functions

Prevention

- Integration in sectoral policies
- Precautionary measures
- Prevention of contamination
- Measures to limit or mitigate sealing

Identification

- Identification of **priority areas** for erosion, organic matter decline, compaction, salinisation, acidification, and landslides in 5 years
- Identification of **contaminated sites** in 25 years

Action

- Programme of Measures
- National Remediation Strategy

Main arguments against legally binding EU policies related to soils

- *"Soils don't move" - subsidiarity principle*
- *Already to many EU regulations*
- *Already enough soil protection by existing National legal instruments*

Soil-relevant policies and soil protection legislation																														
type of measure		AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK	
Regulatory																														
	Binding instruments	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Non-binding instruments	✓	✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓			✓	
	Soil protection laws and regulations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓	✓	✓	✓		✓	✓	✓	
	Soil protection strategies and action plans	✓	✓		✓	✓	✓				✓	✓				✓	✓					✓			✓	✓		✓	✓	
	Environmental laws and regulations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Environmental strategies and action plans	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			✓	✓	
	Environmental impact assessments					✓	✓		✓	✓	✓		✓		✓					✓		✓		✓				✓	✓	
	Standards	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Targets		✓				✓					✓													✓	✓				
	Guidelines	✓	✓			✓	✓		✓			✓		✓	✓	✓	✓	✓				✓	✓			✓		✓	✓	
	Bans																	✓							✓					
	Permits and quotas		✓				✓					✓			✓	✓				✓								✓		
	Planning and zoning	✓	✓	✓	✓		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓			✓		✓	✓		✓	✓	
Economic																														
	Liability schemes								✓							✓														
	Payments	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Pricing						✓		✓			✓	✓		✓			✓		✓						✓				
	Voluntary agreements	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Information																														
	Farm advisory services	✓										✓											✓		✓				✓	
	Innovation groups							✓															✓							
	Participation	✓											✓										✓							
	Public information	✓	✓				✓																✓						✓	
	Trainings and qualifications	✓					✓																✓						✓	
Monitoring																														
	National monitoring systems	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	
	Private monitoring systems				✓																		✓							
Research & innovation																														
	Assessments of soil status and ecosystem services		✓		✓		✓			✓													✓			✓			✓	
	Research projects		✓				✓					✓	✓	✓		✓	✓						✓	✓					✓	

Policies instruments for soil protection among the EU Member States: a comparative analysis.

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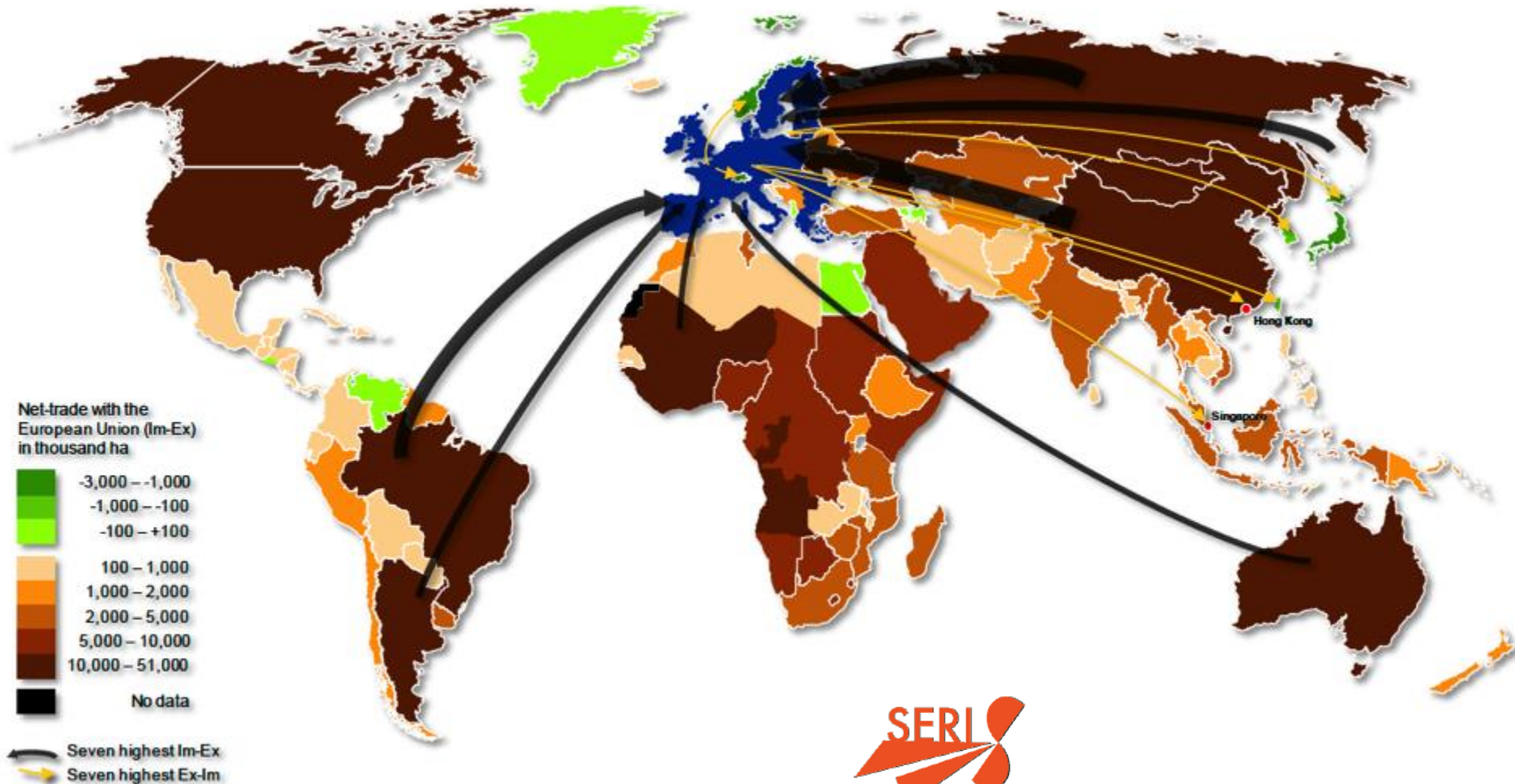
^c Joint Research Centre, European Commission, via E. Fermi 2749, 21027 Ispra, Italy



Why do we need an EU soil policy?

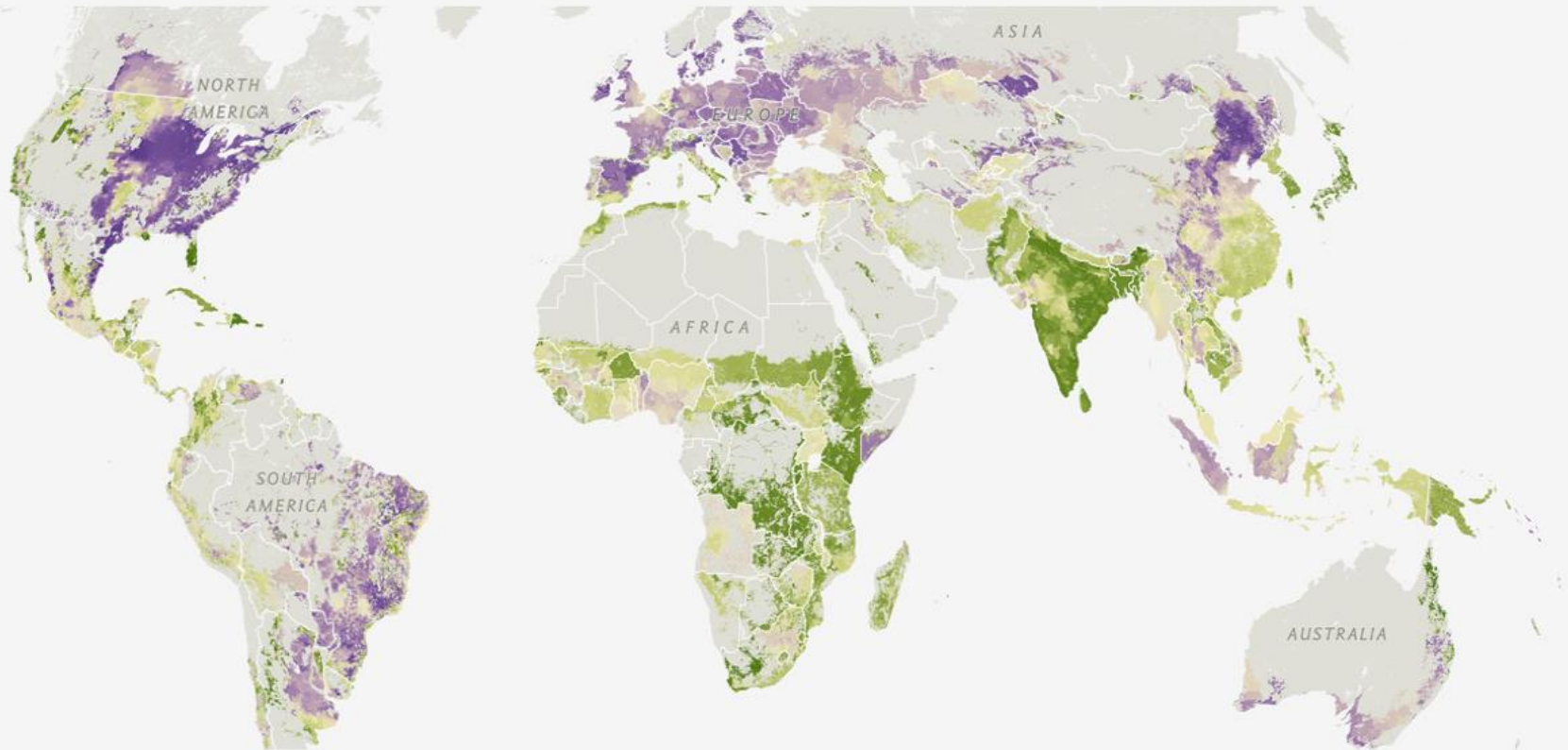
- *Common market distortion*
- *Transboundary soil degradation effects (erosion, climate change, biodiversity loss)*
- *Global legally binding commitments*
- *Indirect land use changes*

Trade balances of virtual land for the EU-27 with the rest of the world; 2004



It would be easier to feed the planet if more of the crops we grew ended up in human stomachs.

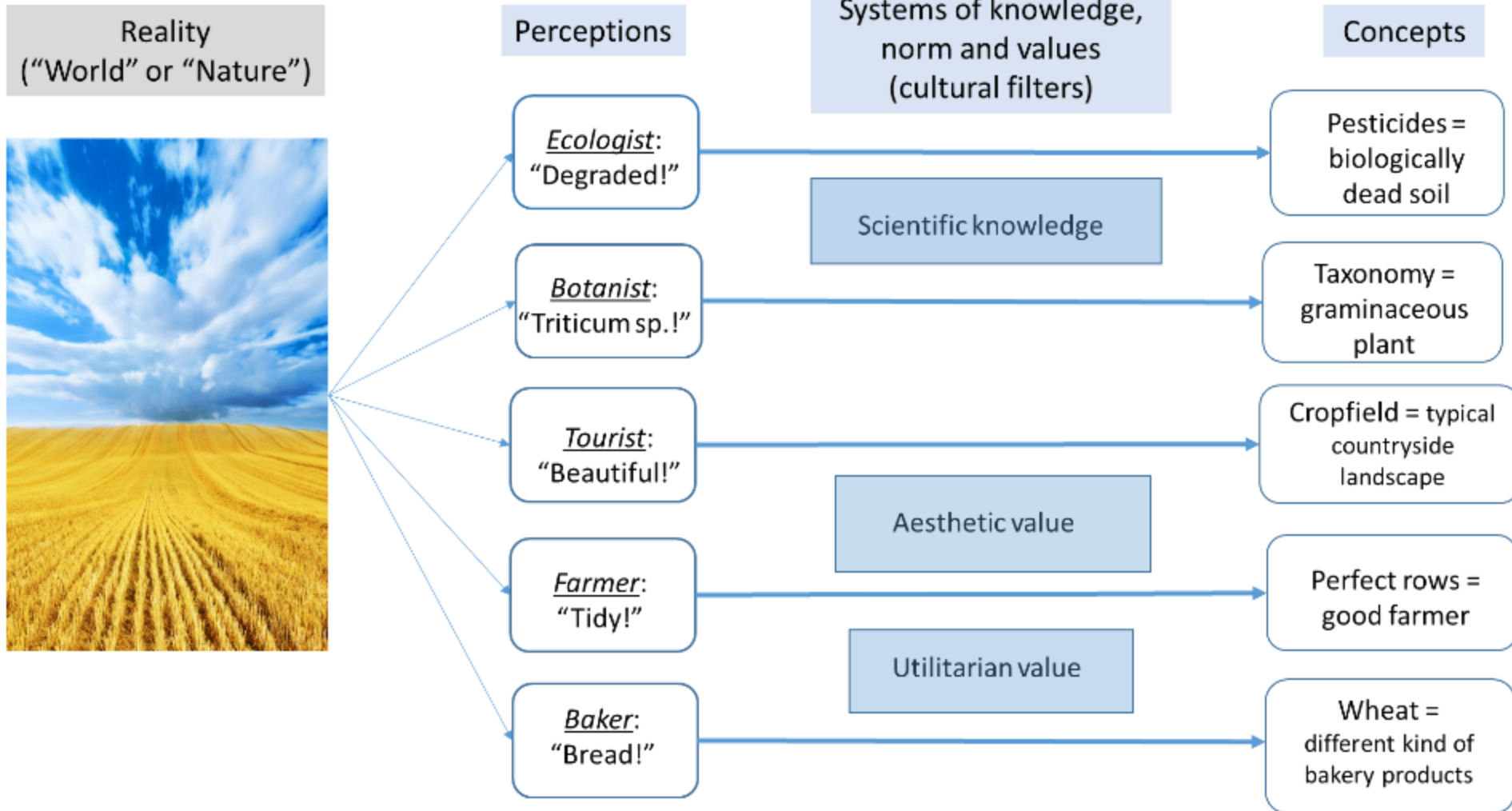
Agriculture's Footprint



Are renewable energies better for soil protection?



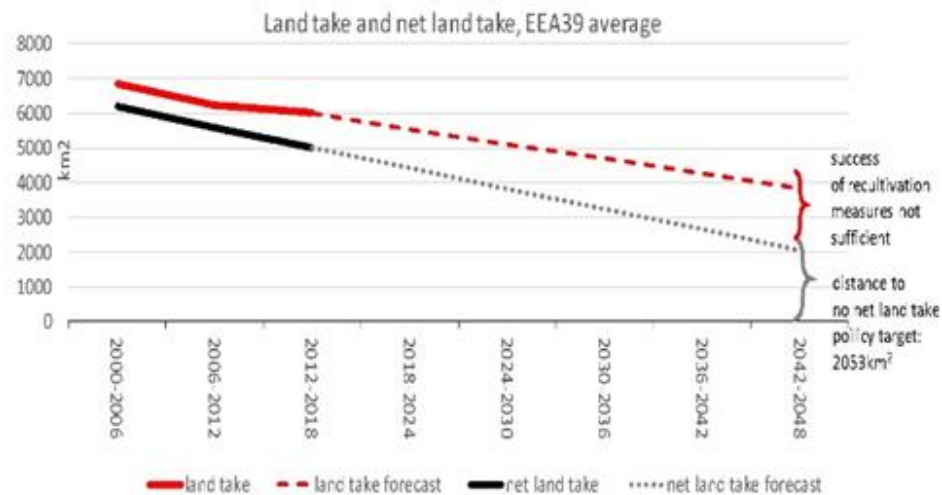
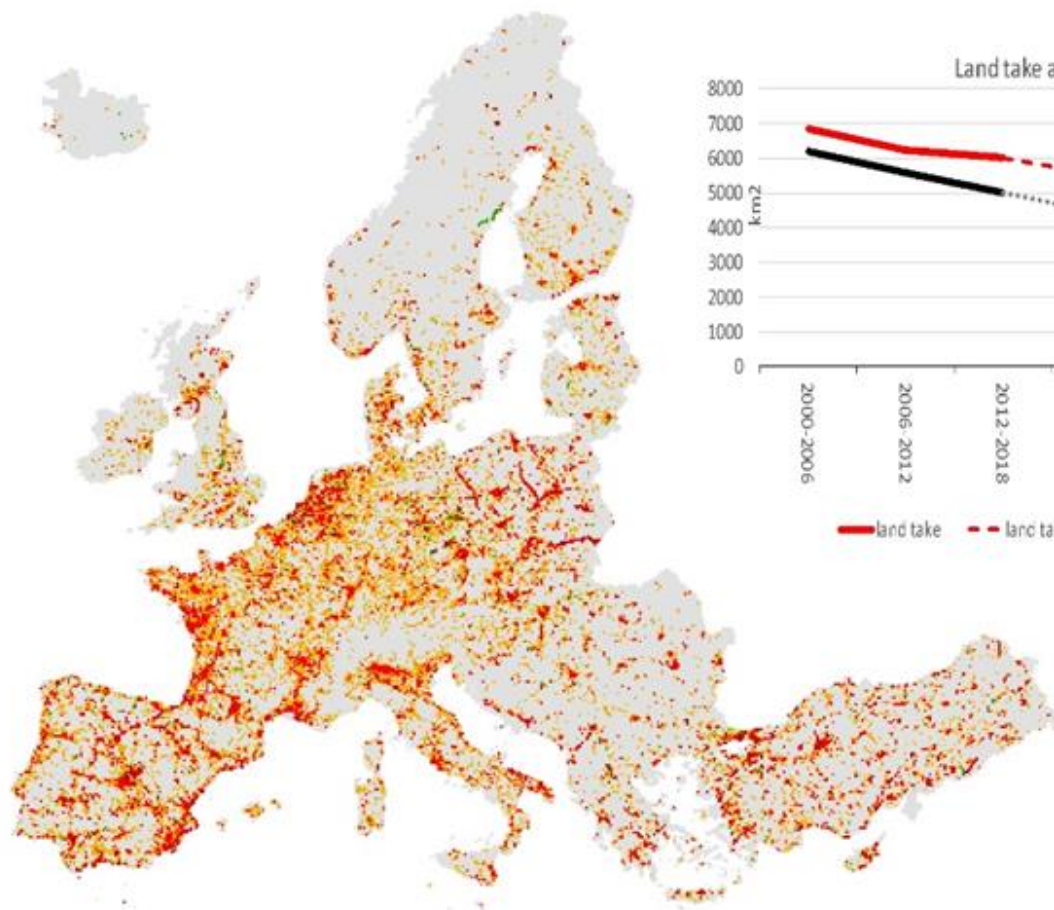
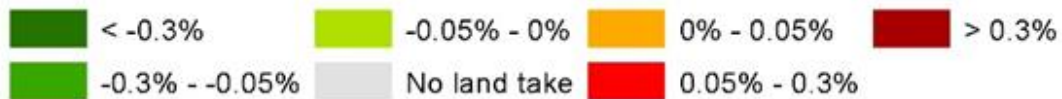
Concepts and perceptions of land degradation and restoration



Yearly soil sealing in the EU: The City of Berlin (ca.100,000 ha)

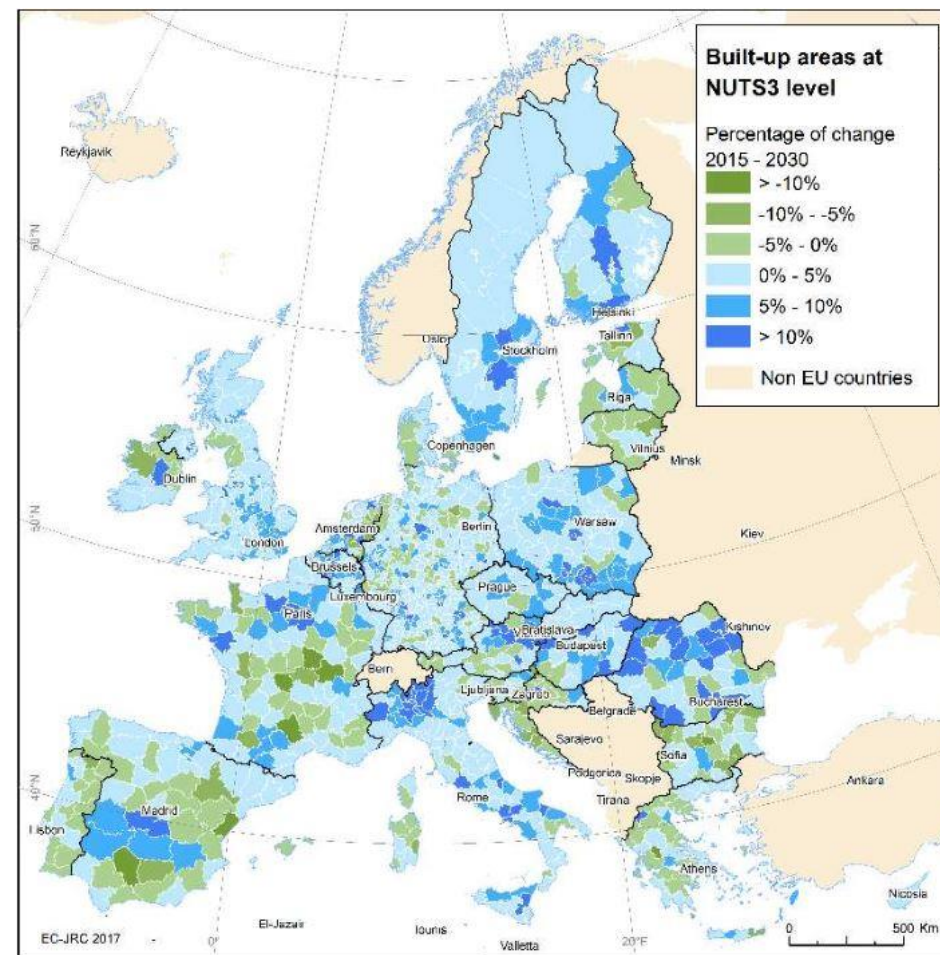
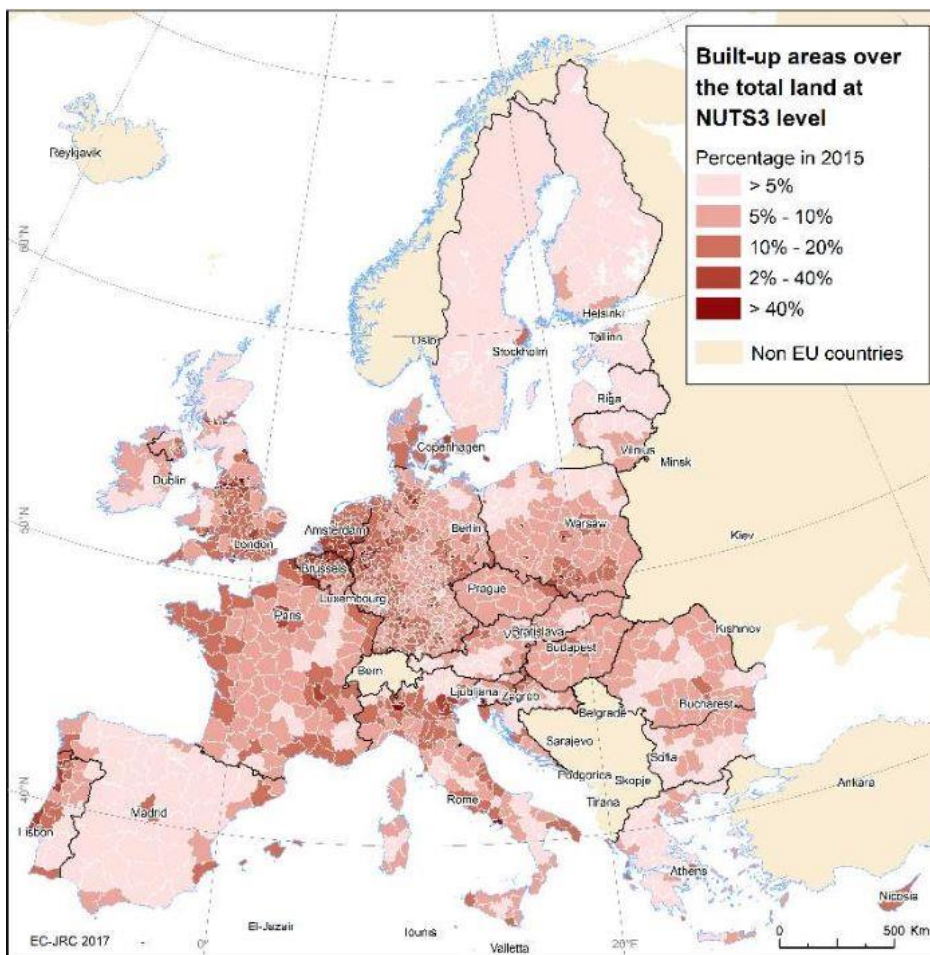


Land take change in the period 2000-2012 in % of 2000 values



Source: EEA

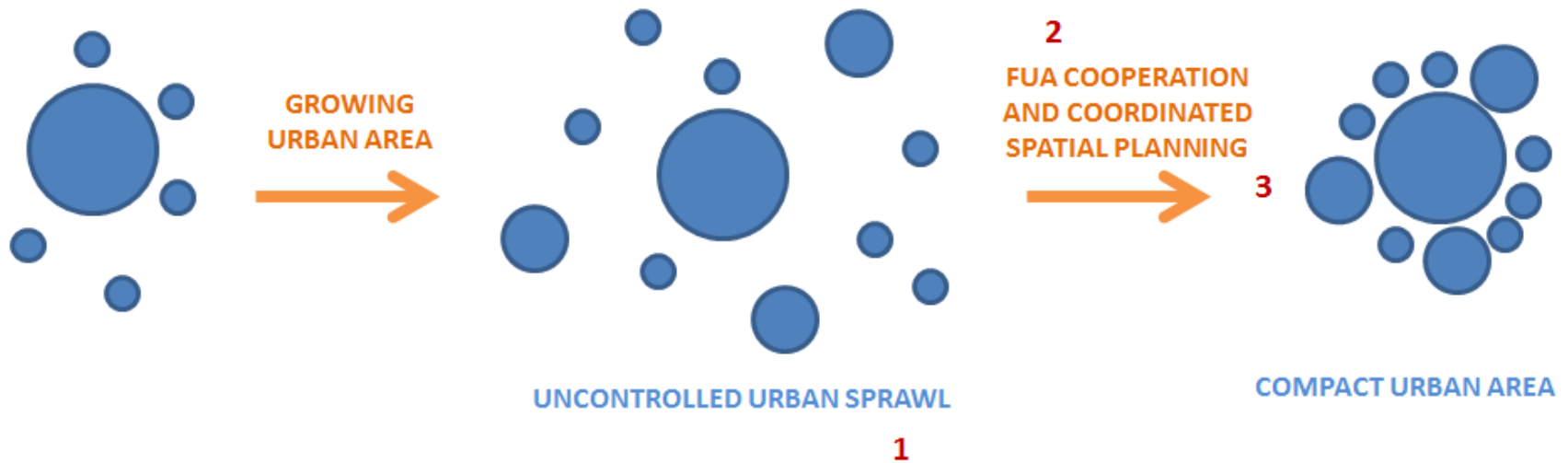
MAIN LAND-USE PATTERNS IN THE EU WITHIN 2015-2030



Perpiña Castillo C., Kavalov B., Jacobs-Crisioni C., Baranzelli C.,
Batista e Silva F., Lavalle C., JRC115895, European
Commission 2019

Web: <https://ec.europa.eu/jrc/en/luisa>
<https://urban.jrc.ec.europa.eu/t-board>

IS ENERGY POLICY INFLUENCING URBAN SPRAWL?



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<https://www.landsupport.eu>



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THANK YOU



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