



Recent EU policy developments and soil data needs

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Within the EU

Industrial Emissions Directive 2010/75/EU

- ❖ Recast of IPPC Directive
- ❖ Transposition by Member States by January 2013
- ❖ Major changes as far as soil is concerned:
 - Introduction of periodic **monitoring** of soil (and groundwater)
 - Establishment of a **baseline report** prior to operating the installation/first update of permit
 - Obligation to remediate the site to its original state upon closure of the installation (**no-degradation approach**)
- ❖ EC working on guidance document for baseline report



CAP reform proposals: First pillar

Direct Payment Regulation, COM(2011) 625, 12.10.2011

- ❖ **Ecological focus area** of 7%, applied at farm level
- ❖ Crop **diversification**: minimum three crops; no crop over 70%; smallest crop at least 5%
- ❖ Protection of **permanent pasture** at farm level (with a 5% allowance per farm)

The greening involves
30% of the direct payment **budget**

CAP reform proposals: GAEC

Financing, Management and Monitoring Regulation,
COM(2011) 628, 12.10.2011

GAEC 4	Minimum soil cover
GAEC 5	Minimum land management reflecting site specific conditions to limit erosion
GAEC 6	Maintenance of soil organic matter level including ban on burning arable stubble
GAEC 7	Protection of wetland and carbon rich soils including a ban of first ploughing

Regional Policy proposals

Cohesion Policy Regulation, COM(2011) 612, 6.10.2011

European Regional Development Fund, COM(2011) 614, 6.10.2011

- ❖ Limit, mitigate or compensate soil sealing and thus **limit land take** on greenfields
- ❖ Promote the **regeneration of brownfield sites** and more generally the remediation of contaminated sites, respecting the 'polluter pays' principle

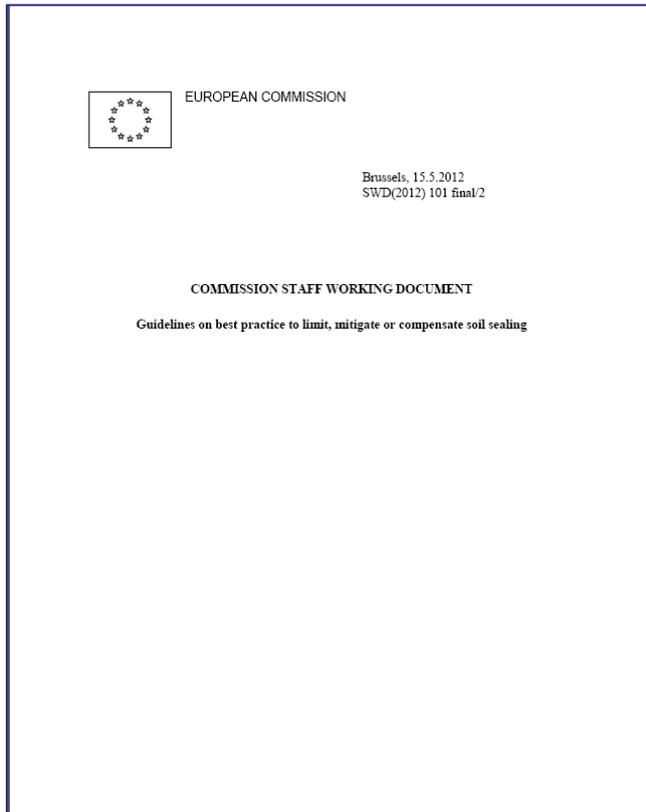


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Guidelines on best practice to limit, mitigate or compensate soil sealing

SWD(2012) 101 final/2, 15 May 2012

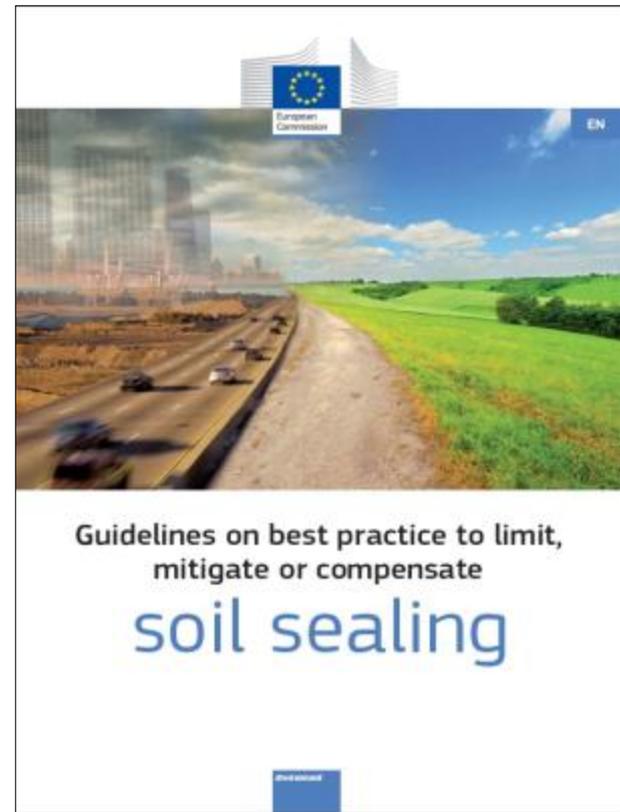
http://ec.europa.eu/environment/soil/sealing_guidelines.htm



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Resource Efficiency Roadmap, COM(2011) 571:

- *Milestone: By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of **land take** is on track with an aim to achieve no net land take by 2050; **soil erosion** is reduced and the **soil organic matter** increased, with remedial work on **contaminated sites** well underway.*
- *Communication on land use (2014)*

The international level



Rio+20: 'The future we want'

205. We [the Heads of State and Government and high-level representatives] recognize **the economic and social significance of good land management, including soil**, particularly its contribution to economic growth, biodiversity, sustainable agriculture and food security, eradicating poverty, the empowerment of women, addressing climate change and improving water availability. (...)

206. We recognize the need for urgent action to reverse land degradation. In view of this, **we will strive to achieve a land-degradation neutral world in the context of sustainable development**. This should act to catalyse financial resources from a range of public and private sources.



- ❖ Conference on '**Land and soil degradation post Rio+20**' on 15-16/11/2012 in Brussels
- ❖ First **Global Soil Week** on 19-22/11/12 in Berlin
- ❖ FAO's **Global Soil Partnership**
- ❖ FAO's proposal to the UN General Assembly to endorse the **World Soil Day** proposed by IUSS
- ❖ EC Communication(s) addressing **MDGs** and **SDGs**
- ❖ **Economics of Land Degradation** initiative
- ❖ EU as an '**affected Party**' under the UNCCD?
- ❖ **Protocol on soils** under the UNCCD?
- ❖ ...

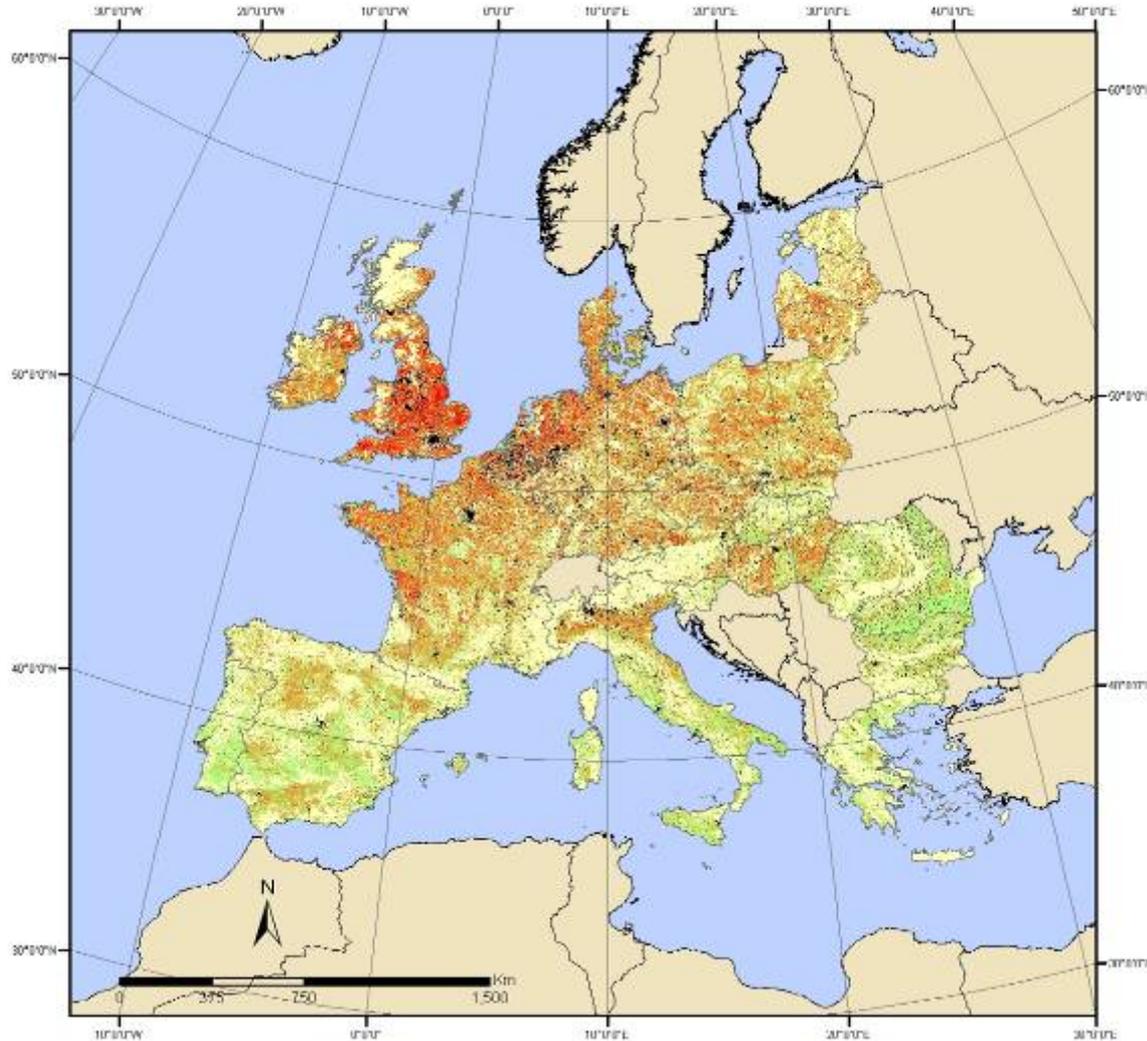


Data needs – but first, an Introduction

Soil biodiversity



An indicator-based map prepared by the JRC shows a preliminary assessment of where soil biodiversity is threatened. This includes areas of high population density and/or intense agricultural activity (e.g. cereals and industrial crops, animal husbandry, greenhouses, fruit orchards, vineyards and horticulture).

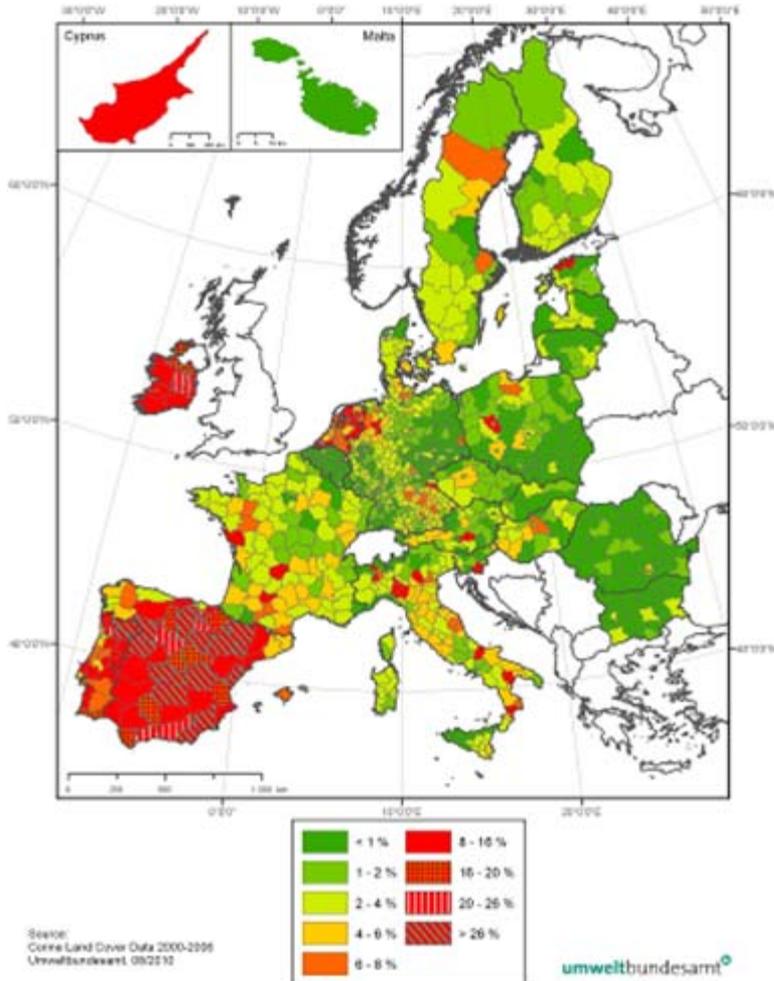


Soil sealing

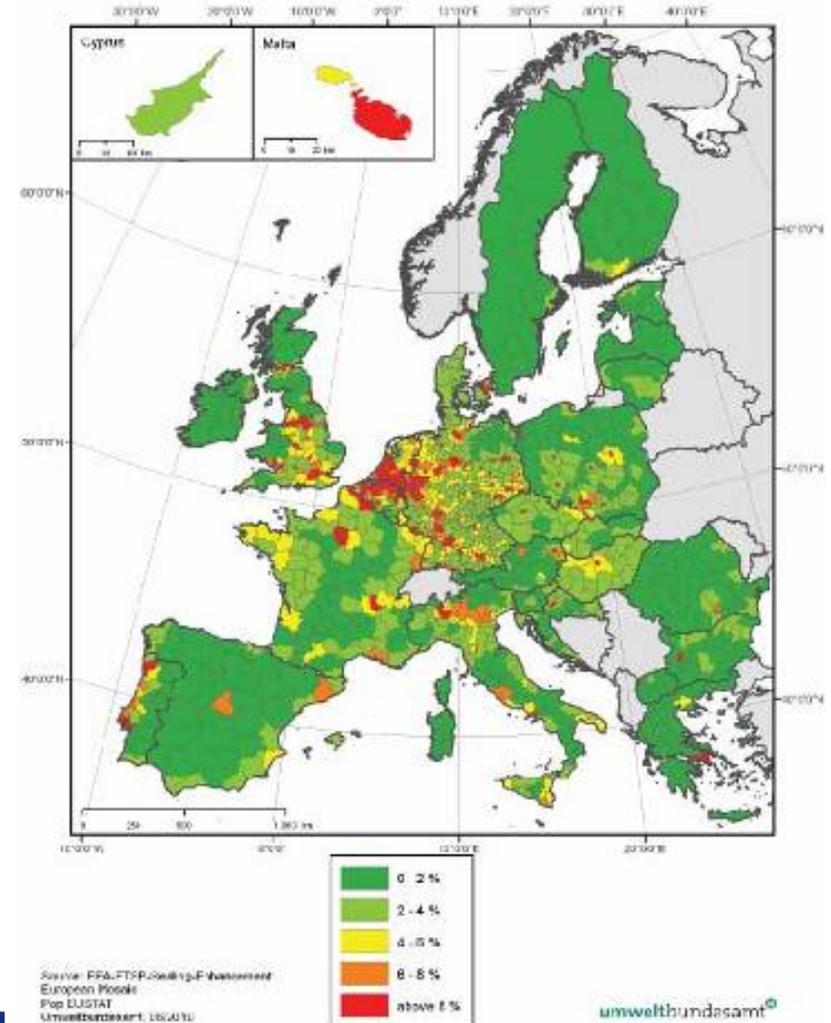


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Land take per administrative unit in the period 2000-2006



Soil sealed surface in 2006

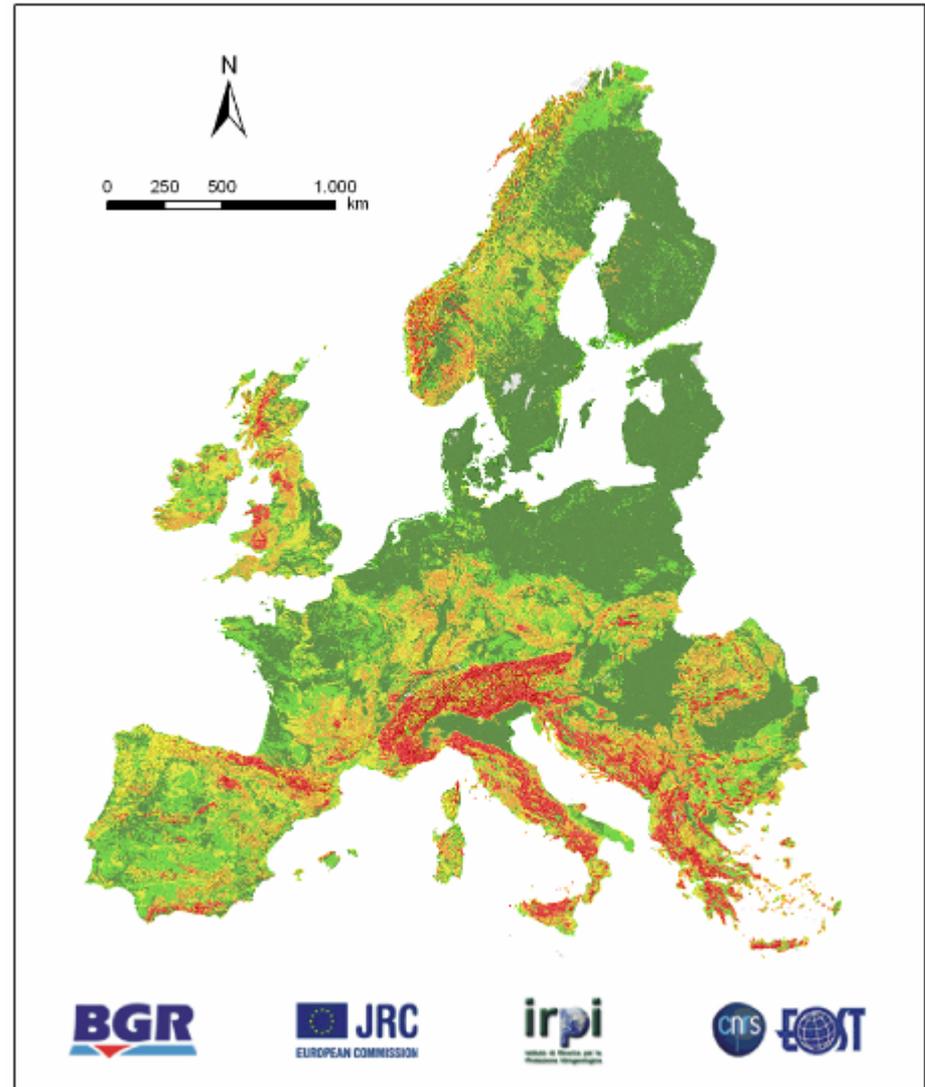


Landslides



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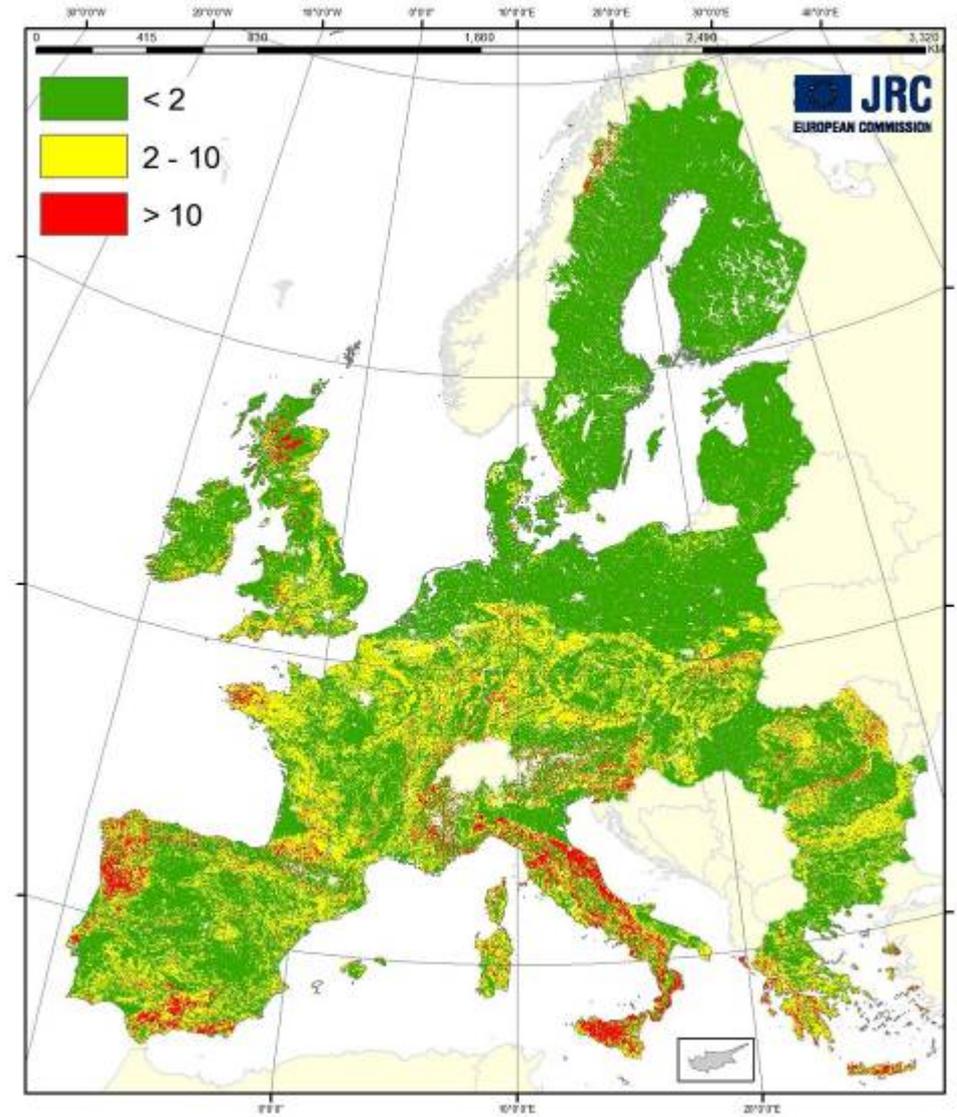
Landslides are a major threat in mountainous and hilly areas across Europe (land abandonment being an aggravating factor), often producing serious impacts on population, property and infrastructure. Over 630,000 landslides are currently registered in national databases.



Soil erosion by water



A recent new model of soil erosion by water constructed by the JRC has estimated the surface area affected in EU-27 at 1.3 million km². Almost 20% of these are subjected to a soil loss in excess of 10 t/ha/y.

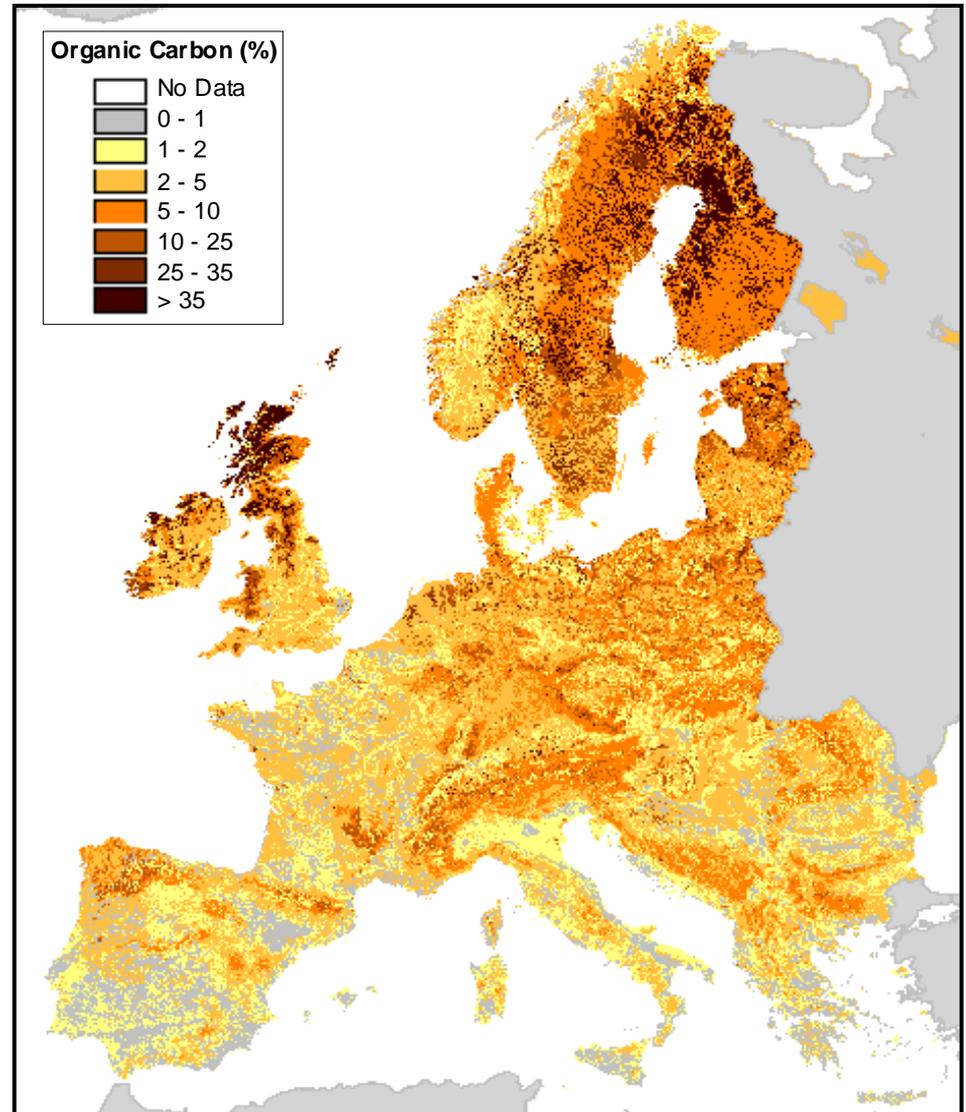


Soil organic matter



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Organic carbon content (%) in the surface horizon (0-30 cm) of European soils.



Soil contamination



Table 4 in the draft CSI015 2012

Country	est. PCS	est PCS/1,000cap	est. CS	est CS/10,000 cap
Albania				
Austria	9,144	1.09	568	0.68
Belgium-Flanders	85,000	13.80	12,811	20.79
Bosnia & H				
Bulgaria				
Croatia				
Cyprus	114	0.14		
Czech Republic				
Denmark				
Estonia			91	0.68
Finland	19,100	3.55	10,700	19.91
France	300,200	4.62		
Germany				
Greece				
Hungary	1,030	0.10	902	0.90
Iceland				
Ireland				
Italy				
Kosovo				
Latvia	6,654	2.98		
Liechtenstein				
Lithuania	8,864	2.73	2,960	9.12
Luxembourg				

FYR of Macedonia			67	0.33
Malta	547	1.31	44	1.05
Montenegro				
Netherlands				
Norway				
Poland				
Portugal				
Romania				
Serbia			103	0.14
Slovakia	1,019	0.19	935	1.72
Slovenia				
Spain				
Sweden				
Switzerland	10,000	1.27	3,420	4.35
Turkey				
United Kingdom	298,296	4.78		
Total/Average	739,968		32,601	

MIN	0.10	0.14
MAX	13.80	20.79
European Average	4.17	5.66



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Data needs

Soil data needs

- ❖ Soil organic matter levels and trends
- ❖ Updated modelling of soil erosion (by water and by wind)
- ❖ Contaminated sites:
 - Estimated numbers
 - Surface area
 - Money spent in identification and remediation
 - Jobs created
 - ...
- ❖ Land take and soil sealing trends at national / regional / local levels
- ❖ ...

Thank you for your attention!



<http://ec.europa.eu/environment/soil/index.htm>