

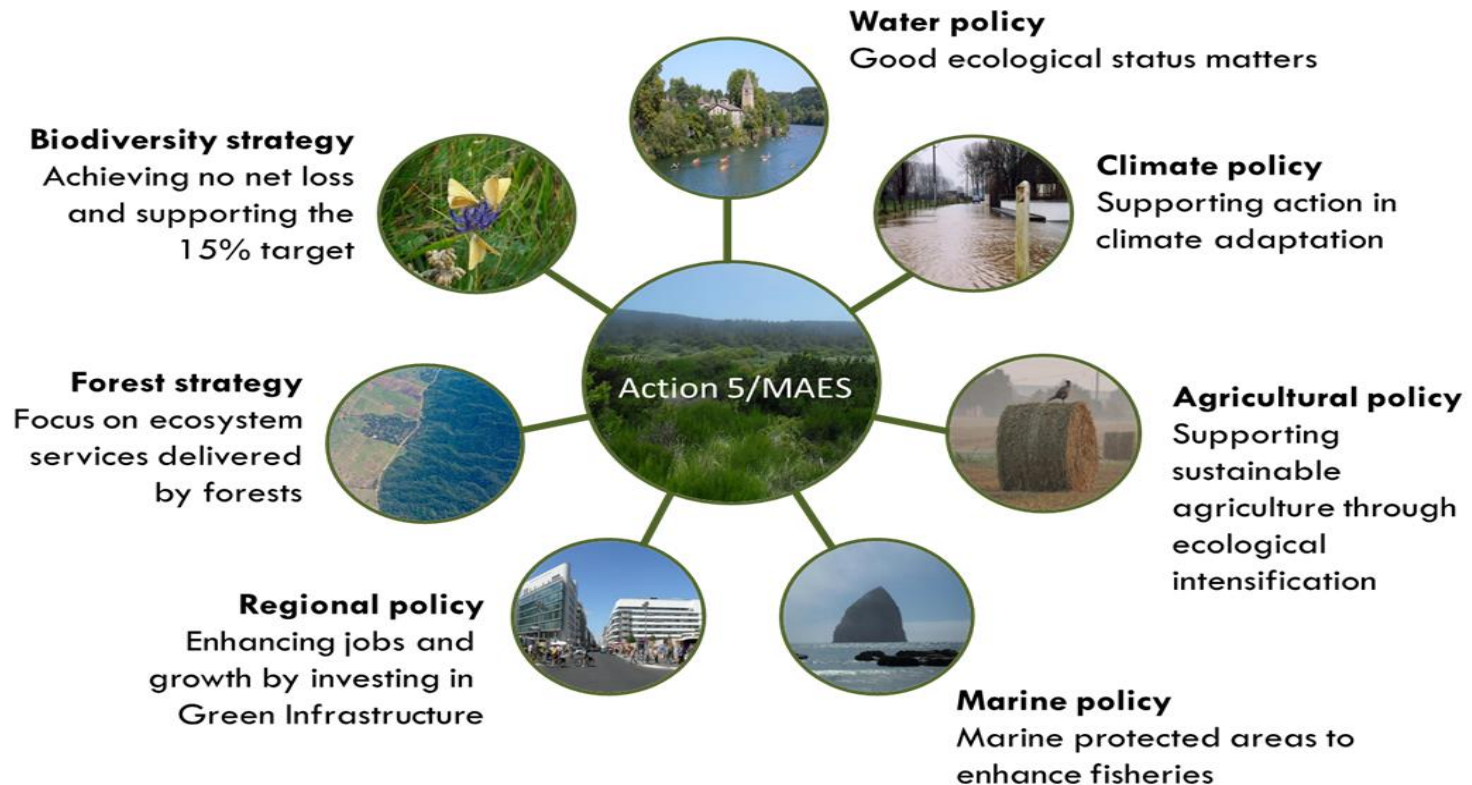


State of play of EU soils and land policy

**Common Forum meeting
12 May 2015
Copenhagen**

*Josiane Masson
DG ENV.B.1 – Agriculture, Forests and Soil
josiane.masson@ec.europa.eu*

EU Soil Policy – a missing link

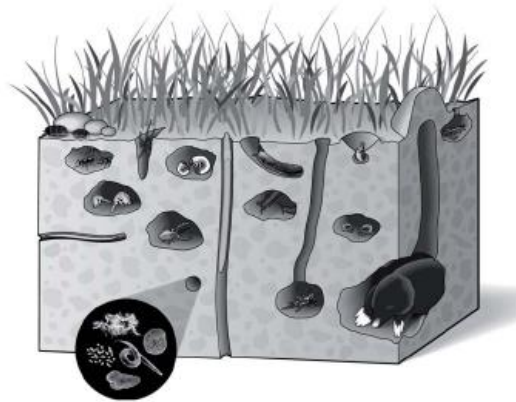


Crucial Ecosystem Services



Food: >95 % of human food calories

In the EU, Agriculture and forestry represent 78 % of land cover



Soil biodiversity: at least a quarter of global biodiversity is in soil

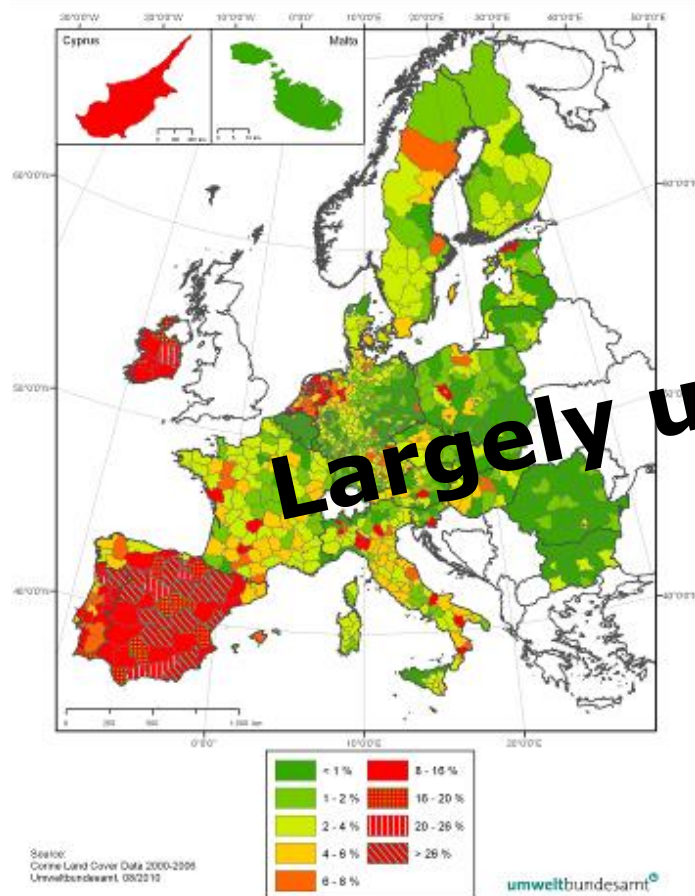
Water storage: up to 3 750 m³ /ha or almost 400 mm of precipitation



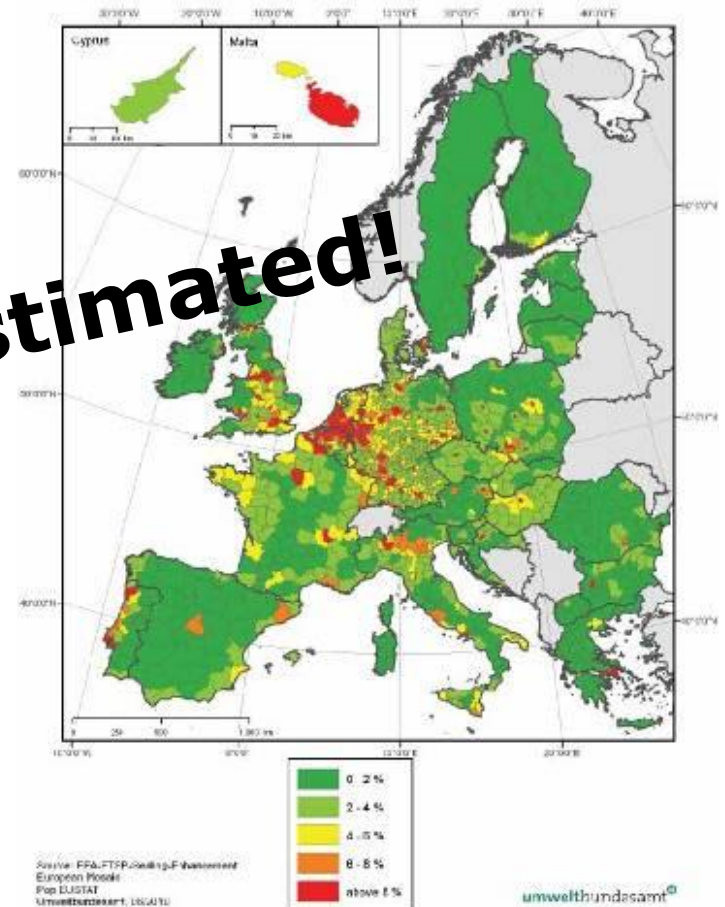
Carbon stocks: 70-75 billion tonnes

Loss of ecosystem services

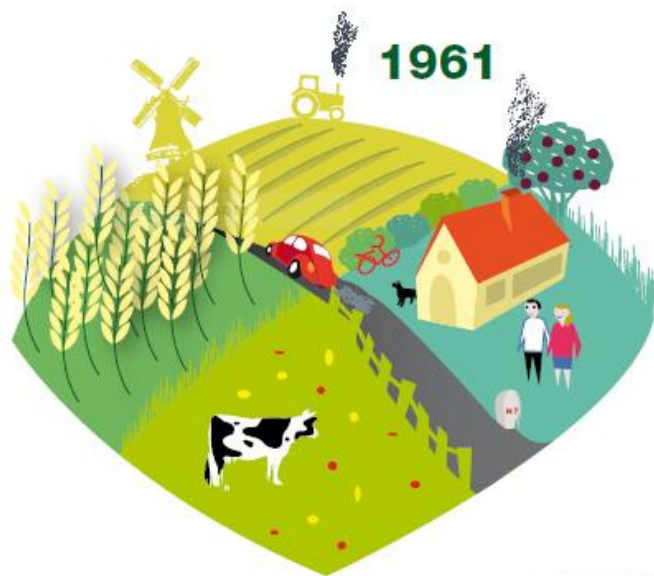
Land take in the period 2000-2006



Soil sealed surface in 2006



Loosing ground



0.50 ha per person



0.25 ha per person

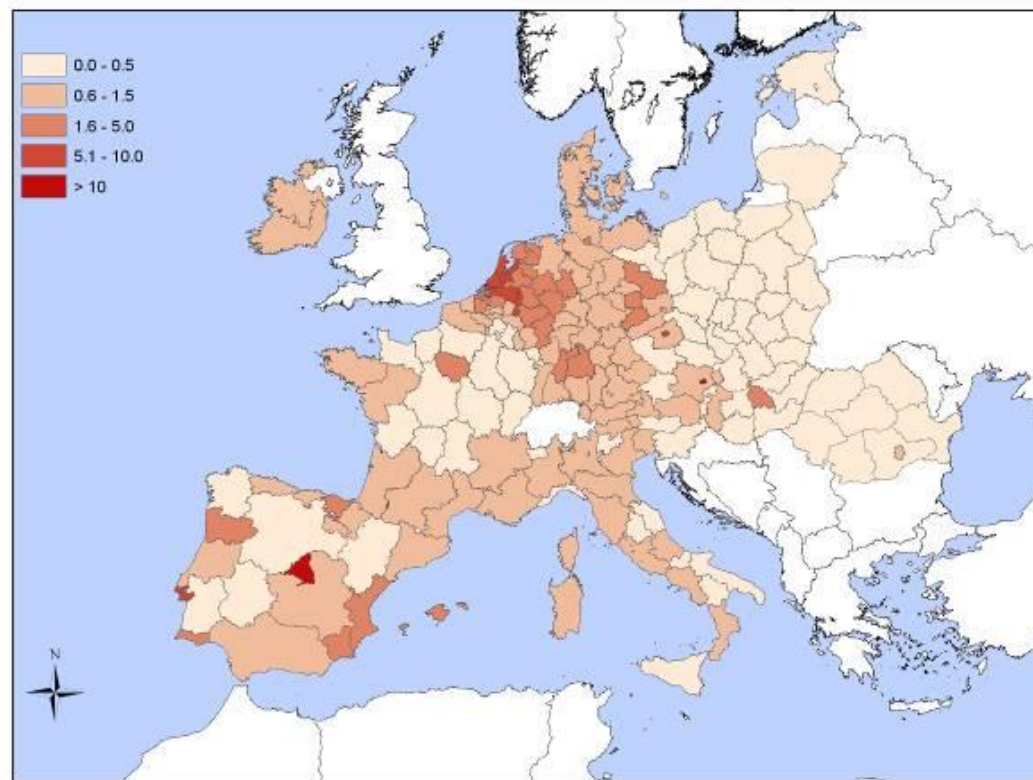
down to 0.10 ha in 2050

FAO prediction

Where food begins



Loss of agricultural production capability between 1990 and 2006 in 19 MSs equivalent to **6.1 million tonnes** of wheat, with large regional variations.



Loss of almost 5% of the average annual European wheat production within a short time-span

Soil Thematic Strategy (2006)

- Communication
- Proposal for a *Soil Framework Directive*
- Impact Assessment

Overall objective is the protection of soil functions and a sustainable use of soil resources, based on the following guiding principles:

- *Prevention* of soil degradation
- *Restoration* of degraded soils

The four pillars of the Soil Thematic Strategy

Public events

Leaflets and brochures

Soil atlases

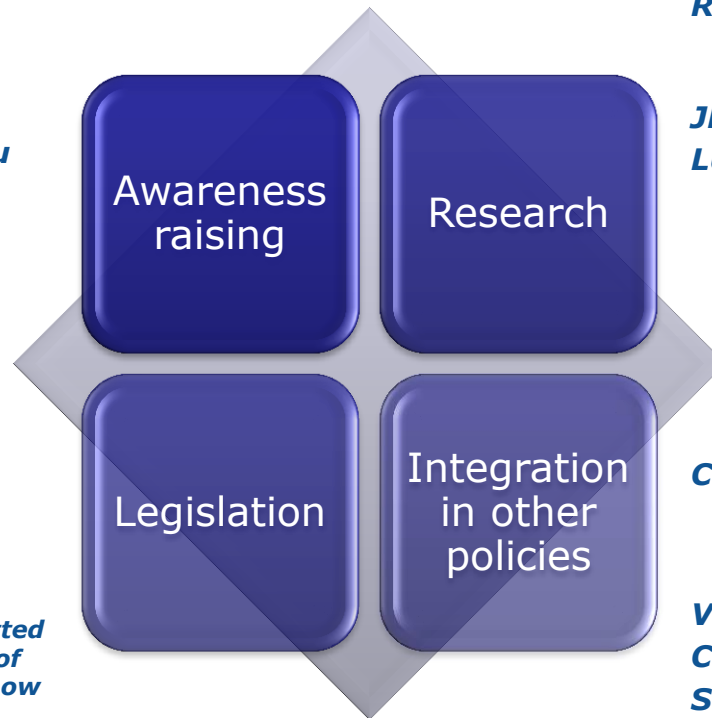
WG Awareness Raising and Education (European Soil Bureau Network - ESBN)

Proposal for a Soil Framework Directive

- COM(2006)232, 22.9.2006

Withdrawal Decision, OJ C 163, 28.5.2014:

- "The Commission remains committed to the objective of the protection of soil and will examine options on how to best achieve this. Any further initiative in this respect will however have to be considered by the next college."



Research projects

- FP7
- Horizon 2020 (e.g. Landmark)

JRC European Soil Data Centre LUCAS

Common Agricultural Policy

- Good Agricultural and Environmental Conditions (GAEC)
- Rural Development Plans

Various Environmental Directives

Cohesion Policy

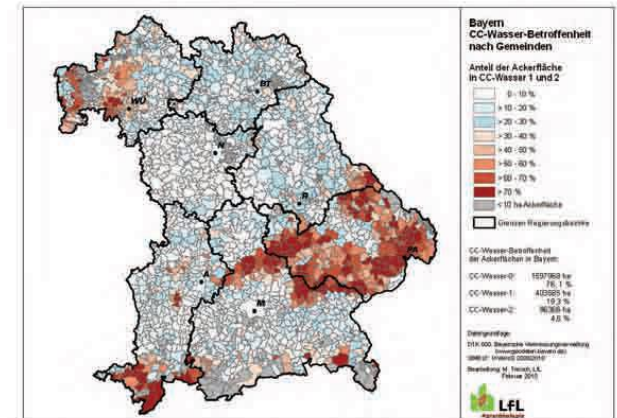
State aids

Withdrawal of SFD proposal (May 2014)

*The Commission remains committed to the objective of the protection of soil and will examine options on how to best achieve this. Any **further initiative** in this respect will however have to be considered by the next college.*

Soil Framework Directive

- *Land take*: Limiting, mitigating and compensating soil sealing (securing soil functions)
- *Precautionary soil protection (prevention and risk reduction)*:
 - **Identification of areas under threat** to address soil degradation (e.g. erosion, soil organic matter loss, salinisation) and
 - **Programmes of measure**: Setting up risk reduction targets, implementing measures (cost-effective and feasible)



➤ *Remedial soil protection:*

- **Identification** of contaminated sites (setting up an national inventory, and conducting risk assessments for all sites within 25 yrs, on site risk assessment for 60 % of sites within 15 yrs)
- **Soil status report:** Providing national authorities with site assessments in case of land sales (***only*** if located in areas with potentially soil polluting activities, defined by an indicative list and according to MS)

and ...

- **Remediation** of contaminated sites - incl. natural recovery or containment where appropriate; funding mechanisms and national remediation strategy; no deadlines for clean-up !
- *E.g. Germany aiming at completing remediation of most sites by 2050 (National Strategy for Biological Diversity, 2007)*
- *National Remediation Strategy:* Targets, prioritisation, timetable for implementation, allocation of funds

EC 2006 estimations (EU-25)

- Potentially contaminated sites: between 3.25 and 3.6 million
- Contaminated sites: between 450,000 and 600,000
- **EEA estimate (2007): 250,000 sites may need urgent remediation**
- Additional identification costs: € 240m per year over 25 years
- Estimated management (remediation) costs (including groundwater): €119bn

Reference Report on the management of contaminated sites in Europe

- There are an estimated 2.5 million potentially contaminated sites in Europe, where soil contamination is suspected and detailed investigations are needed.
- Of the circa 115 000 contaminated sites that have already been identified in Europe, nearly half of them (46%) have already been remediated.
- Contaminated sites are mainly managed using 'traditional' techniques such as excavation and off-site disposal, which together account for about one third of management practices.
- Mining activities, metal industries and gasoline stations are the most frequently reported sources of soil and groundwater contamination. However, the range of polluting activities varies considerably from country to country.
- The most frequently occurring contaminants are mineral oils and heavy metals.

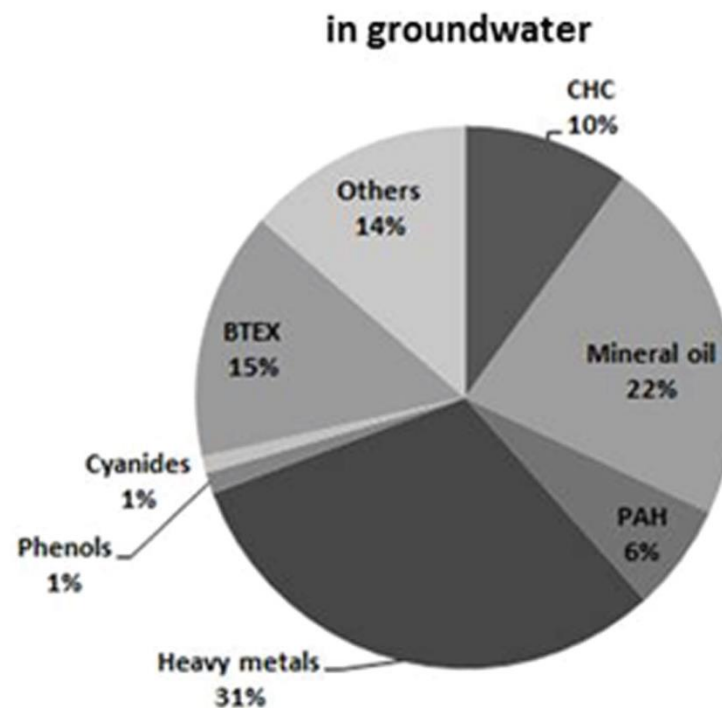
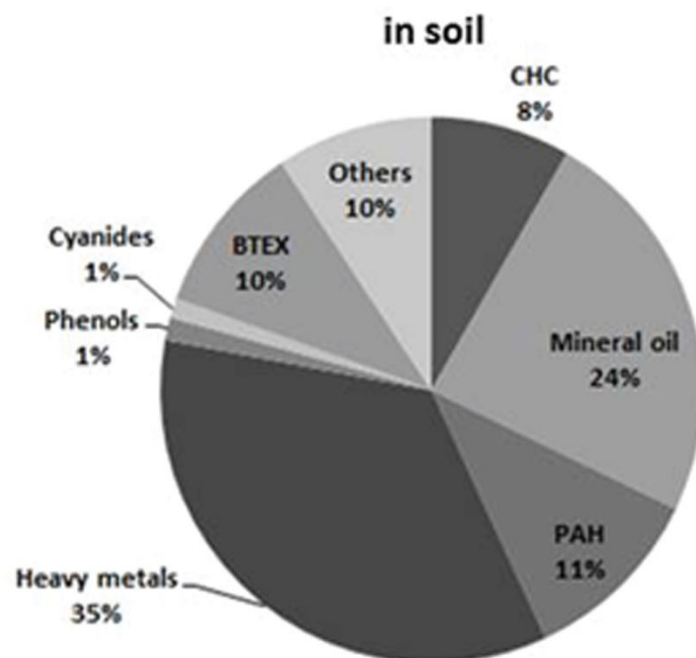
(JRC, 2014)



Soil contamination



Most frequently occurring contaminants



The results of a questionnaire compiled recently by the JRC are shown above. The questionnaire was sent to 39 European countries; 27 countries returned the questionnaire (source Huber & Prokop, 2012)

National targets

Austria	2025	Identification of Contaminated Sites completed
Denmark	2016	Site identifications and preliminary investigations are completed nationwide
Estonia	2030	All contaminated areas to be remediated or sustained
Romania	2020	Environmental remediation of the majority of polluted areas
Switzerland	2025	Remediation or containment of historic soil contamination

EU legislation with relevance for soil contamination

- Polluter pays: Environmental Liability Directive (2004/35/EC) defining “land damage”, which is any land contamination that creates a significant risk of human health. Aims at ensuring the rehabilitation of the environment
- Waste: EU Waste Framework Directive (2008/98/EC) addresses the prevention of pollution from waste and defines any contaminated materials, substances or products resulting from remedial action with respect to land as waste
- Water:
 - EU Water Framework Directive (2000/60/EC) requires a program of measures, including measures to address land contamination that causes water pollution, by 2015
 - EU Groundwater Directive (2002/118/EC) aims to prevent or limit pollutants, including pollutants from historical contamination of land, into groundwater
- Emissions: The EU Integrated Pollution Prevention and Control Directive (2008/1/EC) requires the permitting of new or existing industrial and agricultural activities with a high pollution potential – *replaced by IED*

Industrial Emissions Directive

- IED - 2010/75/EU - to be transposed nationally by 2013.
- Covering around 52,000 industrial and agricultural installations with a high pollution potential, from refineries to pig farms.
- 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 published guidance document for baseline report (as requested by Article 22 of the directive)



Resource Efficiency Road Map (2011)

- *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.***
- *The Commission will further develop the scientific knowledge-base (...) leading to a **Communication on land use** (in 2014).*

Rio+20 Outcome Document 'The Future We Want' (2013)

- *We will strive to achieve a land degradation neutral world in the context of sustainable development.*

7th EAP (2014-2020)

- *The Union and its Member States should also reflect as soon as possible on how soil quality issues could be addressed using a targeted and proportionate risk-based approach **within a binding legal framework.** Targets should also be set for sustainable land use and soil.*

Regional Policy proposals

Cohesion Fund Regulation, COM 1300/2013, 17.12.2013

European Regional Development Fund, COM 1301/2013, 17.12.2013

Investment priority: Preserving and protecting the environment and promoting resource efficiency

... to improve the urban environment, including regeneration and decontamination of brownfield sites ...

Objective: Limiting land take on Greenfields and recycling of land, including remediation of contaminated sites

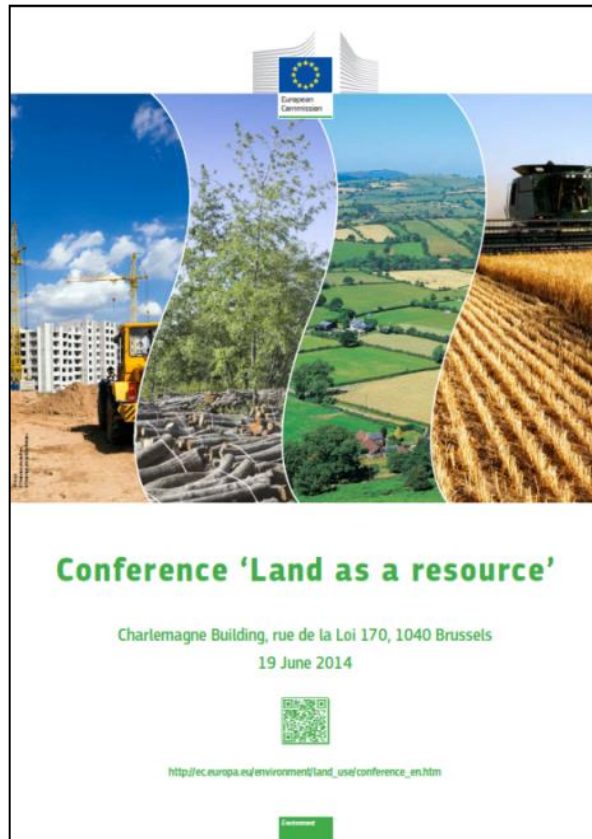
Special ERDF objective: **Sustainable urban development**



Cohesion Policy

- Around € 3.0 billion have been allocated to the rehabilitation of industrial sites and contaminated land as part of the Cohesion Policy in the period 2007-2013 out of a total of around €49.6 billion of planned EU investments.
- Hungary, the Czech Republic and Germany have allocated the most funding (€475, 371, and 332 million respectively).
- By the end of 2010, Member States had allocated about 28% of funds to specific projects. Thus, considerable resources are available to tackle the EU's industrial legacy in eligible regions.

Conference on Land as a Resource 19/6/2014



- **The issues at stake**
- **National and regional experiences**
- **Exploring policy action at EU level**

http://ec.europa.eu/environment/land_use/conference_en.htm

Activities in 2015, using the momentum of the IYS:



- Organize and participate to a series of events for raising awareness on soils,
- continue the implementation of the Thematic Strategy for Soil Protection,
- Study (2015) - update inventory of existing soil protection policy and regulations and their implementation in all Member States,
- develop a methodology to map and assess the ecosystem services provided by soil, with particular consideration to economic value,
- discuss with Member States and stakeholders how best to implement the 7th EAP commitments on soil
 - *Dialogue using existing networks of stakeholders*

Land as a resource

- Further analysis of the need to act at EU level, for potential inclusion of a Communication on Land as a Resource in Commission Work Programme 2016.
- Study on identification appropriate indicators & relevance and feasibility of setting targets
<http://bookshop.europa.eu/en/study-supporting-potential-land-targets-under-the-2014-land-communication-pbKH0414979/>

Thank you for your attention!

2015
International
Year of Soils



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