

# European policies towards effective soil carbon management

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#### **Context**

- Importance of soil recognized at a strategic level:
  - Soil Thematic Strategy, 2006
  - Draft Soil Framework Directive, 2006
  - Communication on land as a resource, expected 2014
- No overarching policy framework for soil protection. Instead, soil protection is addressed through a number of other policy areas mostly as a secondary objective and/or indirectly
- Soil carbon management is gaining recognition, but existing policy measures do not explicitly target the issue

Best practices for soil carbon management & productivity on cropland		
	Relevance to existing policy objectives	Policy mechanisms
Organic manure input	Nitrates Directive	Nutrient budget plans Cross-compliance
Cover Crops, Perennial Crops, Legumes	Water Framework Directive, Nitrates, Directive Resource Efficiency Roadmap, Adaptation Stratey, Floods Directive	CAP Rural development River Basin Management Plans Pillar 1 greening payment
Incorporation of crop residues	WFD, Nitrates, Resource Efficiency, Adaptation Strategy	CAP cross-compliance (ban on arable stubble burning)
No-tillage practices	WFD, Nitrates, Resource Efficiency, Adaptation Strategy, Floods Directive	CAP Rural development River Basin Management Plans
Other examples of management practices with soil C benefits		
Organic farming  Include perennial grasses in		
cropping systems  Maintenance and restoration of peatlands and wetlands (including rewetting of organic soils)  Conversion of arable land to grassland in risk areas  Afforestation of cropland/ Woodland creation in risk areas	Birds & Habitats Directives, WFD, Nitrates Directive, Floods Directive, Adaptation Strategy	Primarily Rural Develoment  LIFE +  Pillar 1 greening payment for grassland protection



## **Common Agricultural Policy - Pillar 1 (direct payments)**

- Greening measures: crop diversification, protection of permanent grassland,
   ecological focus areas → 30% of Pillar 1 budget
- Cross-compliance:
  - ▶ Good Agricultural and Env Condition (GAEC) standards: erosion, soil organic matter
  - Statutory Management Requirements (Nitrates Directive, Habitats & Birds Directive)
  - Compulsory Farm Advisory System in all EU Member States
- Missed opportunity: GAEC 7 on protection of carbon rich soils



## **Common Agricultural Policy - Pillar 2 (rural development)**

- ▶ A wide range of available measures, in particular:
  - ► Agri-environment-climate, organic farming, environmentally friendly investments (30% of RD funding)
  - ► Farm advisory support
- Problem of insufficient funding
- Challenge of effective measure design and control
- Focus on measures with management prescriptions (not result-based)



## Framing soil carbon management in the evolving framework

- Promote soil carbon management as part of sustainable soil management and as delivering multiple ecosystem services
- Targeting & balancing of regulatory and voluntary measures according to risk and the potential to deliver multiple benefits
- Improved integration and coherence for soil protection in general, including a landscape perspective → need an overarching soil policy setting targets for different soil threats incl soil organic matter loss
- Supporting instruments: LULUCF accounting, mapping of ecosystem services
- Introduce mandatory standards for rich organic soils
- Clear management prescriptions, role of results-oriented agri-environment schemes
- Demonstrate benefits for agricultural productivity & resource efficiency
- Importance of awareness-raising and decision-support for farmers





#### Thank you for your attention.

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