




GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

GRA Flagship

Soil Carbon Sequestration Flagship



Presentation to GRA Council
Berlin, 10 August, 2018

Soil Carbon Sequestration flagship 2017-2019

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Developing solutions

Decision support toolbox

- Argentina, Australia, Brazil, France, Ireland, Lithuania, New-Zealand, USA (+ other countries?)

REGIONAL PROJECTS

- Regional maps of crop and pasture practices suited to reach SCS targets
- Regional implications of SCS practices for
 - yields,
 - drought tolerance and climate change adaptation
 - N₂O and CH₄ emissions, energy use

Monitoring solutions

Methods to certify SCS

- Argentina, Australia, Brazil, France, Ireland, Spain, USA, EU-ERAGAS (+ other countries?)

REGIONAL PROJECTS

- Handbooks and guidelines for project scale MRV adapted to regional contexts and agricultural systems
- Modelling & remote sensing methods for SOC stock change in crop and pasture systems

Adopting solutions

Enabling environment

- France, Spain (+ other countries?)

PROJECT 3

- Regional stakeholder workshops on SCS
- Criteria for sustainable SCS projects supporting livelihoods

Support by CIRCASA: an EC funded Coordination and Support Action

CIRCASA “Coordination of International Research Cooperation on Soil Carbon Sequestration in Agriculture” (2018-2021)

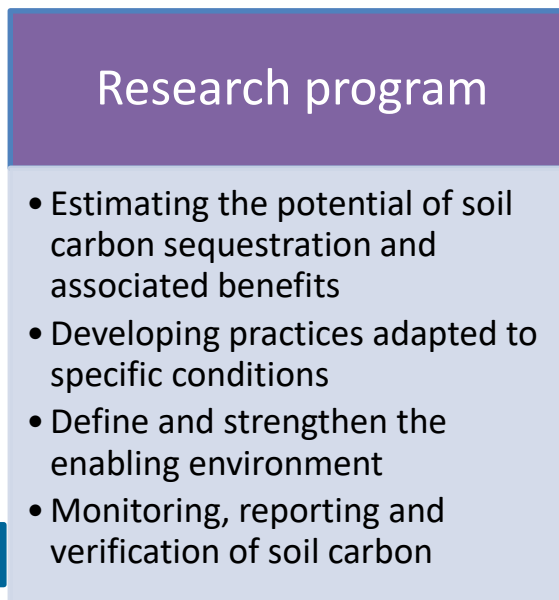
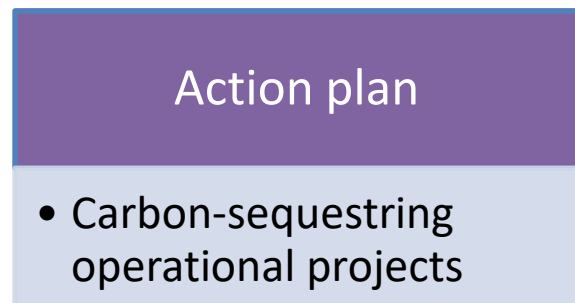


Develop **international synergies** concerning research and knowledge transfer on **agricultural soil carbon sequestration** at European Union (EU) and global levels.

First achievements vs. goals of the flagship

- **Sharing solutions.** Development of an **online collaborative research platform**, which allows partners to share knowledge and experiences as well as research results and coordinate research collaborations. Taking stock of national and international research projects and networks on agricultural SOC sequestration
- **Monitoring solutions.** Global maps showing **hotspots** for soil C loss and gains and potential for soil C sequestration of changes in agricultural practices
- **Adopting solutions.** Organization of **11 stakeholder’s regional workshops** (South Africa, China, Australia, Denmark, ...) on barriers and knowledge needs for soil C sequestration. Stakeholder **survey** on the barriers for soil organic carbon sequestration and on knowledge needs: <https://polls.ecologic.eu/index.php/791211?lang=en>

The “4 PER 1000: SOILS FOR FOOD SECURITY AND CLIMATE” initiative



International
Multi-stakeholder
280 partners

Scientific and Technical Council:

- Criteria for the assessment of agricultural soil carbon sequestration **development projects**
- **Science-policy dialog** with development banks and funding agencies

Next steps

- **Monitoring solutions:** guidelines on **indirect methods** (remote sensing, carbon balance, agricultural statistics) for monitoring soil carbon
- **Adopting solutions:** soil **carbon offset initiatives**. A workshop to bring together several regional initiatives and discuss their possible extension to other regions
- **Developing solutions:** working with regional projects on soil carbon sequestration. **Requires further interactions with countries and agencies** (e.g. Fontagro project in Latin America, carbon offset projects in Europe). Potential to do more in other regions.



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