

# GOING BEYOND CARBON

Explore the 31 indicators powering our Beyond Carbon upgrade



#### Every loaf starts with the land.

Picture 90 farms within 150 km of Paris, each between 50 and 200 hectares, all growing winter wheat — the same grain behind the bread many of us eat every day. This real-life example will help you understand our new set of metrics, giving you a clear, real-world look at what Beyond Carbon really means for any given supply shed.

What follows is a snapshot of the 31 indicators, spread across 5 domains, that make up our new Regen Ag Score — the beating heart of this upgrade.



This specific winter wheat supply shed, made of 90 farms, has an average Regen Ag Score of 5.5 out of 10. Year-to-Year it increased +0.6% thanks to strong performance on Soil Health, Water Management and Climate. Practice improvements are required on Biodiversity & Socio Economics.





## Soil Health

Healthy soils are key to resilient, productive agroecosystems. Regenerative practices enhance structure and support closed-loop nutrient management.

#### Physical Soil Health

4.3

Well-structured soils are key to ecosystem services. Minimizing disturbance and maintaining continuous plant cover supports the delicate process of structure build up. Improved soil structure also reduces erosion thereby protecting the farmers' capital and lowering restoration costs for society.

Stir (soil disturbance)	41.1
No Till	59%
Yearly soil erosion risk	0.9 t/ha
Cover crops	55%
Yearly soil coverage	283 days

#### Chemical Soil Health

8.9

Sustaining soil fertility requires responsible fertilizer use. Optimizing mineral—especially nitrogen—inputs curbs emissions, while organic inputs and crop residues build resilience, boost circularity and ensure food security.

Organic fertilizer use	16%
Yearly humic balance	2.9 t/ha
Field residue application	6.2 t DM/ha

Based on aggregated data, for entire farm rotation



## Biodiversity

Diverse species ensure ecosystem resilience. In agroecosystems, regenerative practices enhance productivity and self-sustainability by creating habitats and minimising pollution.

Habitat Creation	3.6	In field Biodiversity	4.6	Minimising Pollution	4.4	
Regenerative practices sustain life by promoting crop diversity and species diversity on field borders, creating viable habitats for all species.		Regenerative practices boost plant biodiversity by increasing species variety and extending crop rotation duration.		By reducing phytosanitary product use, regenerative agriculture can significantly enhance biodiversity at the landscape level.		
Biodiversity favorable farmin	g <b>0.6</b>	Spatial crop diversity	4.4	Pesticide pressure	65 EIQ	
High nature value farming	MSA/km²	Temporal crop diversity	3.5	Non synthetically treated surface	44%	
Field border density	170 m/ha					
Pollination sufficiency	0.3					

Available June 2025



## Water Management

Regenerative hydrology boosts agroecosystem resilience to extreme weather, ensuring productivity and ecosystem services despite heavy rainfall or drought.

#### Water Consumption

\*

To optimize water use, the «Four Rs» approach—Receive, Recharge, Retain, Release—monitors soil-plant water movement, reducing runoff, enhancing infiltration, and maximizing productivity.

maximizing productivity.		
Blue water consumption ratio	*	%
Rainfall runoff potential	*	%
Infiltration	*	mm
Water productivity	*	kg/m³

#### **Water Quality**

7.4

Farming practices, including phytosanitary products and fertilizer use, affect water quality. Monitoring excess use and implementing measures to minimize negative impacts is crucial.

Pesticide consumption	3.9 IFT/ha
Mineral nitrogen surplus	18 kg N/ha
Mineral phosphorus consumption	14.9 kg P/ha
Riparian buffer strip width	* m

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### Climate

Regenerative agriculture is a powerful nature-based solution for mitigating climate change, maximizing carbon storage in soils while minimizing GHG emissions.

#### **GHG** Emissions

6.3

Farm operations like soil work, fertilizer use, and fuel consumption contribute to GHG emissions. Regenerative practices can optimize these processes, significantly improving a farm's GHG balance.

Synthetic GHG emissions 1.3

1.2 t CO2e/ha

#### Carbon Sequestration

5.9

Maximizing photosynthesis and returning biomass to soil draws down atmospheric carbon and boosts soil fertility.

Normalized carbon sequestration

-2.0 t CO2e/ha

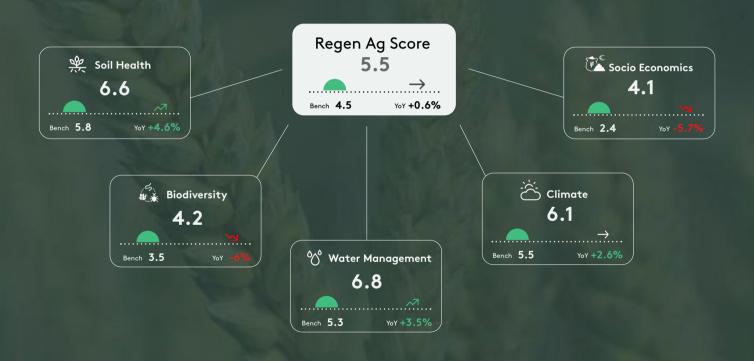


## Socio Economics

Regenerative agriculture strengthens the socio-economic viability of farms by fostering more self-sustaining systems.

Input Managemer	nt <b>4.5</b>	Productivity	3.8	Social Role	3.8	
Regenerative agriculture boosts farm self-sufficiency by enhancing circularity, recycling, and ecosystem services, reducing reliance on nutrients, pesticides, and fuel.		A more resilient system reduces operational costs which, balanced with yields enhances overall farm profitability.		Beyond economics, more resilient agroecosystems also improve labour conditions including manageable working hours that support farmer well-being.		
Farm fertilisers costs	5 % above average	Farm yield (all crops)	3.8	Farm working hours	3.5 h/ha	
Farm pesticides costs	On average					
Farm fuel costs	8% above average					

**Today**, this supply shed of 90 farms is under-performing on biodiversity and socio-economics.



**Tomorrow**, they can implement the identified practice changes to improve their resilience.

	SOIL HEALTH	BIODIVERSITY	WATER MANAGEMENT	CLIMATE	SOCIO ECONOMICS
📉 Tillage Intensity			•	•	•
M Phytochemicals			•	•	•
✓ Organic Fertilizers			•	•	
✓ Residue Management			•	•	
✓ Cover Cropping		•	•		
✓ Crop Nitrogen Fixation					•
✓ Crop Diversity					
Natural Habitats					



# This is a Game-Changer for our Food System

AgFood companies can now:

- Pilot food supply resilience using indicators that truly reflect the health of the land, the farm, and the entire supply shed.
- Leverage holistic agronomic intelligence by comparing farm performance across time, geographies, and crops.
- Better support farmers with actionable, farm-level insights

   and empower them to get rewarded for the ecosystem services they provide, beyond carbon.
- Report on sustainable sourcing efficiently, with verified and traceable data for both internal and regulatory frameworks.

Want to learn what Soil Capital's programme upgrade, **Beyond Carbon**, can do for you?

Contact us at hello@soilcapital.com