

# Regenerative Potatoes: Maintain Yields, Cut Emissions.

SOIL CAPITAL GIVES POTATO PROCESSORS, RETAILERS, AND QUICK-SERVICE RESTAURANTS A PRACTICAL WAY TO SECURE RESILIENT SUPPLY CHAINS AND LEAD ON SCOPE 3 EMISSIONS REDUCTION.

## Why it matters.

In potato supply chains, shifting to regenerative practices is becoming critical. Here are the top three reasons why businesses are investing:



Regenerative practices improve soil health and water management, reducing the risk of yield loss from pests, disease, or climate stress.



**REDUCE EMISSIONS** 

Supporting farmers to adopt regenerative methods is one of the most direct levers to cut value-chain emissions.



Investing in farmer resilience builds loyalty, ensures long-term viability of grower networks, and safeguards reputation.

# The 4 Key Practice Changes for Regen Ag in Potatoes Farming.

These four practice changes are the key levers for potato businesses to support the transition to regenerative agriculture, securing supply resilience and reducing Scope 3 emissions.



#### COVER CROP DURATION + DIVERSITY

Farmers can seed of multi-species cover crop as early as possible to enhance soil fertility & protect the soil against erosion



### REDUCED TILLAGE

Farmers can then reduce and eventually avoid winter ploughing thanks to adequate cover crops which enhance soil structure.



#### COVER CROP DESTRUCTION

By choosing the right cover crop species and appropriate destruction methods, farmers can increase soil health without impacting soil preparation for the potato crop.



# REDUCED MINERAL FERTILISATION

Last step, farmers can can reduce mineral Nitrogen with the right fertilisation methods and the increased presence of legumes in rotation & cover crops

# Top Challenges for Potatoes Growers.

Potato farming is a well-oiled machine — and every practice change can feel like a threat. Through step by step guidance, grounded in agronomic reality, yields can be maintained.



#### **HEAVY TILLAGE**

Unlike cereals, potatoes depend on deep soil work, making reduced tillage a tough change.



#### INPUT INTENSITY

Potatoes' sensitivity makes reducing synthetic inputs risky for yield and quality.



#### POST-HARVEST COMPLEXITY

Operations like straw export or mechanical residue breakdown add complexity for farmers.



#### **COVER CROPS**

Residues before potato planting are seen as a barrier, limiting cover crop use.

"You have to test in your *own* fields and move forward gradually."

> Romain Crete, Farmer, France 530ha total / 50ha of potato fields 2.5%organic matter

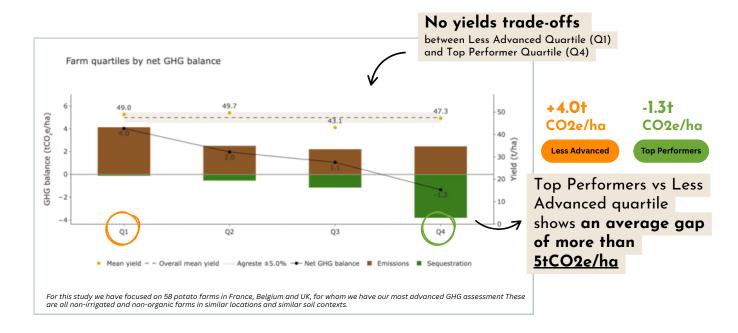
## 8 Scenarios Towards Regenerative Farming.

Each scenario represents a practical step farmers can take. Based on real farm data from France, Belgium, and the UK, these changes deliver measurable carbon reductions and removals. **Important note: for agrifood businesses sourcing potatoes, accounting for removals is critical for to hit their 2030 goals.** 

OLE	SCENARIO 1	1-species cover crop, 2 months, winter ploughing	
ACCESABLE	SCENARIO 2	4-species cover crop, 2 months, winter ploughing	co <sub>2</sub> -83 %
	SCENARIO 3	4-species cover crop, 3 months, winter ploughing	111
	SCENARIO 4	4-species cover crop, 4 months (Aug 15 -Feb 15), delayed winter ploughing	
AMBITIOUS	SCENARIO 5	4-species cover crop, 6 months (Aug 15 – Feb 15), followed by ploughing	
	SCENARIO 6	4-species cover crop, 6 months (Aug 15 – Feb 15), followed by reduced tillage (RT)	-188 %
	SCENARIO 7	4-species cover crop, 7 months (Aug 15 – Mar 15), followed by reduced tillage and planting on Apr 1st	
VERY OUS AMBITIOUS	SCENARIO 8	4-species cover crop, 7 months (Aug 15 – Mar 15), followed by reduced tillage and planting on Apr 1st + Nitrogen input reduction thanks to cover crop residues: –30 units (kg N/ha)	-193 %

## Real GHG Results From Farmers in Our Programs.

This graph, based on Soil Capital program farmers' data (grouped by quartile), shows the impact you can expect. The results are clear: **regenerative practice change delivers significant carbon reductions without compromising yields.** 



# Partnering With Soil Capital.

Wherever agri-food businesses are on their regenerative agriculture journey, Soil Capital provides the tools and expertise to design, launch, and scale programs that deliver real change on farms and measurable progress toward sustainability & scope 3 goals.

Common AgFood Challenges	SOIL CAPITAL's approach	
"Farmers won't change unless they see a clear business case."	<b>Outcome-based financial incentives</b> that reward farmers for measurable progress at farm level.	
"We have a farmer program, <u>but</u> practice change is slow."	<b>Multi-year agronomic support</b> delivered by farmers to farmers. and accelerate new practice adoption.	
"We need credible Scope 3 data we can stand behind."	Third-party certified carbon data for both reduction & removals, rooted in farm-level measurement.	
"Carbon is important, but we also need to show resilience beyond emissions."	A holistic set of 31 indicators covering water, biodiversity, soil fertility, farm economics, and climate.	
"It's hard to align and co-invest across the value chain."	<b>Supplier engagement capabilities</b> that enable shared investment and coordinated action.	
"We only buy potatoes — why should we pay to support the other crops?"	A <b>coalition of offtakers</b> shares the cost of supporting the full rotation, making the transition viable and grounded in farm reality.	