

1st public policy workshop: Climate-neutrality and food security



ClieNFarms
Climate Neutral Farms

in a nutshell

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Started in January 2022, no results yet

”Co-develop and upscale systemic locally relevant solutions to reach climate neutral and climate resilient sustainable farms across Europe”

Demonstrate that **innovative systemic solutions** have the potential to generate positive impacts by 2030

- Achieving climate neutrality of farms and farming systems
- Reducing GHG emissions
- Increasing carbon sequestration and storage
- **While keeping farms and farmers viable**

EU contribution:
€ 11 999 975
Overall Budget:
€ 13 639 536



48 months
1 January 2022

Testing and demonstrating **systemic innovations** in support of the F2F Strategy.
(LC-GD-6-1-2020)

33 partners &
14 European countries



A consortium of 33 partners will interactively integrate and improve existing solutions to achieve economically viable business models in farming systems through a multi-actor approach.

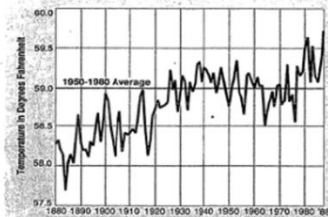


There is not a day without alarming news



VOL. CXXXVII... No. 47,546 Copyright © 1988 The New York Times NEW YORK, FRIDAY, JUNE 24, 1988

Global Warming Has Begun, Expert Tells Senate



Global Warming: Greenhouse Effect?
Average global temperatures through the first five months of 1988. As a baseline, scientists use the global average from 1950 to 1980.
Source: James E. Hansen and Sargis Lebedeff
The New York Times/June 24, 1988

Sharp Cut in Burning of Fossil Fuels Is Urged to Battle Shift in Climate

By PHILIP SHABCOFF
Special to The New York Times
WASHINGTON, June 23 — The earth has been warmer in the first five months of this year than in any comparable period since measurements began 130 years ago, and the higher temperatures can now be attributed to a long-expected global warming trend linked to pollution, a space agency scientist reported today.
Until now, scientists have been cautious about attributing rising global temperatures of recent years to the predicted global warming caused by pollutants in the atmosphere, known as the "greenhouse effect." But today Dr. James E. Hansen of the National Aeronautics and Space Administration told a Congressional committee that it was 99 percent certain that the warming trend was not a natural variation but was caused by a buildup of carbon dioxide and other artificial gases in the atmosphere.

Drought Raising Food Prices; Inflation Effect Seems Minor

By ROBERT D. HERSHEV J.
Special to The New York Times
An impact lasting centuries on climate change, said in an interview that there was no "magic number" that showed when the greenhouse effect was actually starting to cause changes in climate and weather. But he added, "It is time to stop waffling so much and say that the evidence is pretty strong



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Disaster at sea: global warming hits UK birds

By MICHAEL MCCARTHY
Environment Editor

HUNDREDS OF thousands of Scottish seabirds have failed to breed this summer in a wildlife catastrophe which is being linked by scientists directly to global warming.
The massive unprecedented collapse of nesting attempts by several seabird species in



unprecedented in Europe." More than 6,000 pairs of great skuas were recorded in Scotland in the same census; this year they have produced a handful of chicks — perhaps fewer than 10 — while the arctic skuas (1,100 pairs in the census) have failed to produce any surviving young.
The 51,000 pairs of arctic terns, and the 18,700 pairs of Shetland kittiwakes — small gulls — have "probably suffered complete failure", said Mr Ellis.
In Orkney the picture is very similar although detailed figures are not yet available. "It looks very bad," said the RSPB's warden on Orkney mainland, Andy Knight. "Very few of the terns have raised any chicks at all."
The counting and monitoring is still going on and the figures are by no means complete. It is likely that puffins, for example, will also have suffered massive breeding failure but because they nest deep in burrows, this is not immediately obvious.
But the astonishing scale of what has taken place is already clear — and the link to climate change is being quickly made by scientists. It is believed that the microscopic plankton on which they nested larvae feed are moving northwards as the sea water warms, leaving the baby fish with nothing to feed on. This is being seen in the North Sea in particular where



MediaWeekly

20-PAGE SUPPLEMENT
Sylvia Auton: First Lady of Magazines | Charlie Whelan: On the Business Press | Jon Snow: My Life in Media

● Climate change: report warns point of no return may be reached in 10 years, leading to droughts, agricultural failure and water shortages

Countdown to global catastrophe

By Nicholas M. Carter
Environment Editor
THE climate warning danger posed by the world's warming is now so serious that the world has reached a point of no return, a report says.
The report, which is the first of a series of reports from the Intergovernmental Panel on Climate Change, says that the world is now in a state of "dangerous" climate change and that the point of no return has been reached.
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Manure applied to soils



Manure left on pasture



Manure management & housing



Synthetic fertilizers

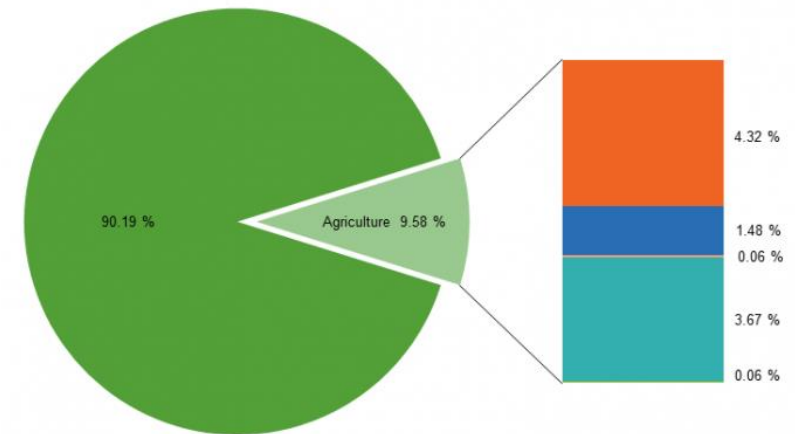


Crop residues



Enteric fermentation

Agriculture is part of the problem ...



- Non-agricultural sectors
- Enteric fermentation
- Manure management
- Rice cultivation
- Agricultural soils
- Field burning of agricultural residues and others



Manure applied to soils



Manure left on pasture



Manure management & housing



Synthetic fertilizers



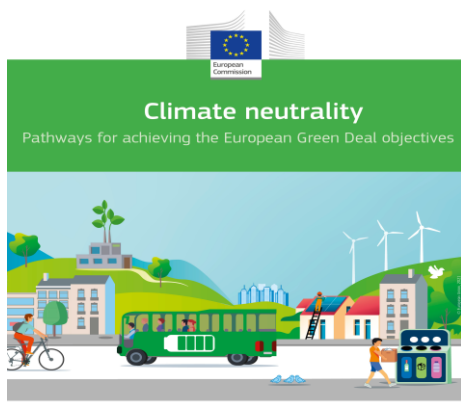
Crop residues



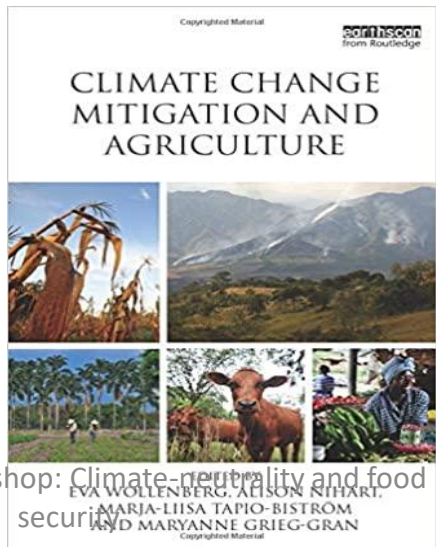
Enteric fermentation

Agriculture is part of the problem...

...but is also part of the solution!

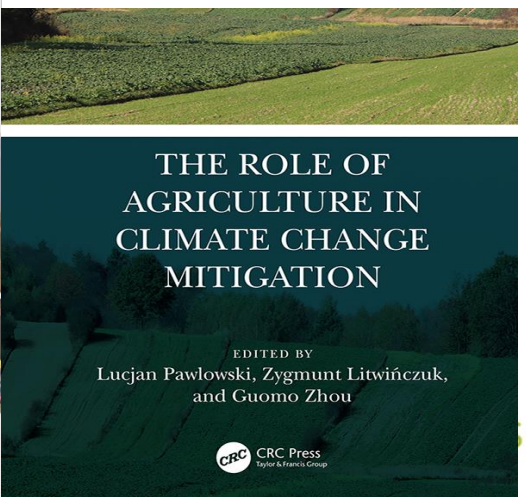


Climate neutrality
Pathways for achieving the European Green Deal objectives



CLIMATE CHANGE MITIGATION AND AGRICULTURE

EDITED BY
EVA WOLLENBERG, ALISON NIHART,
MARJA-LIISA TAPIO-BISTRÖM
AND MARYANNE GRIEG-GRAN



THE ROLE OF AGRICULTURE IN CLIMATE CHANGE MITIGATION

EDITED BY
Lucjan Pawłowski, Zygmunt Litwińczuk,
and Guomo Zhou

- **CARISMA: Coordination and Assessment of Research and Innovation in Support of Climate Mitigation Action**
- **EIFFEL: REVEALING THE ROLE OF GEOSS AS THE DEFAULT DIGITAL PORTAL FOR BUILDING CLIMATE CHANGE ADAPTATION & MITIGATION APPLICATIONS**
- **LANDMARC: LAND-use based MitigAtion for Resilient Climate pathways**
- **ASFORCLIC : Adaption strategies in forestry under global climate change impact**
- ...

Overall concept

ClieNFarms scope is based on a demonstration approach through the creation of **I3S**



Innovative

Induce emergence and adoption of efficient innovation including different elements such as finance; banks; collaborative proposals; etc.



Systemic

Takes into account the farm and the surrounding (eco)systems (suppliers; advisers; researchers; etc)

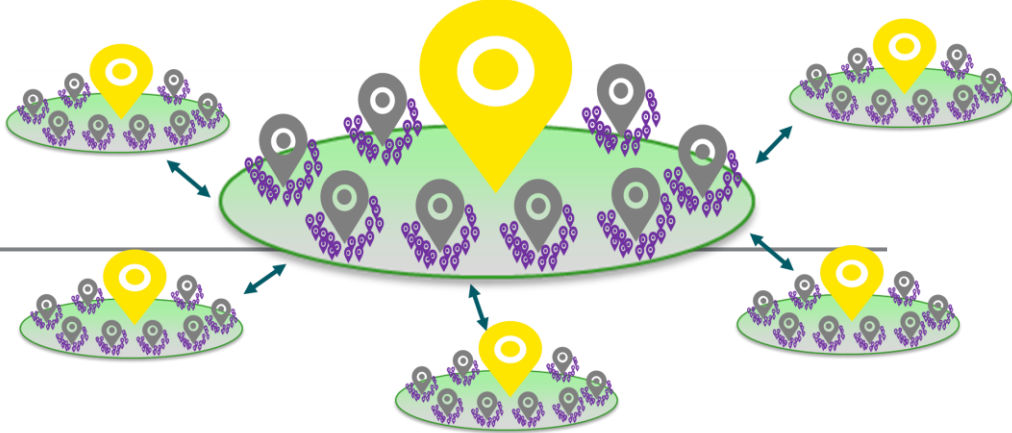


Solution Spaces

Proposes and tailors different solutions for each farm depending on their pedoclimatic conditions, resources and constraints.

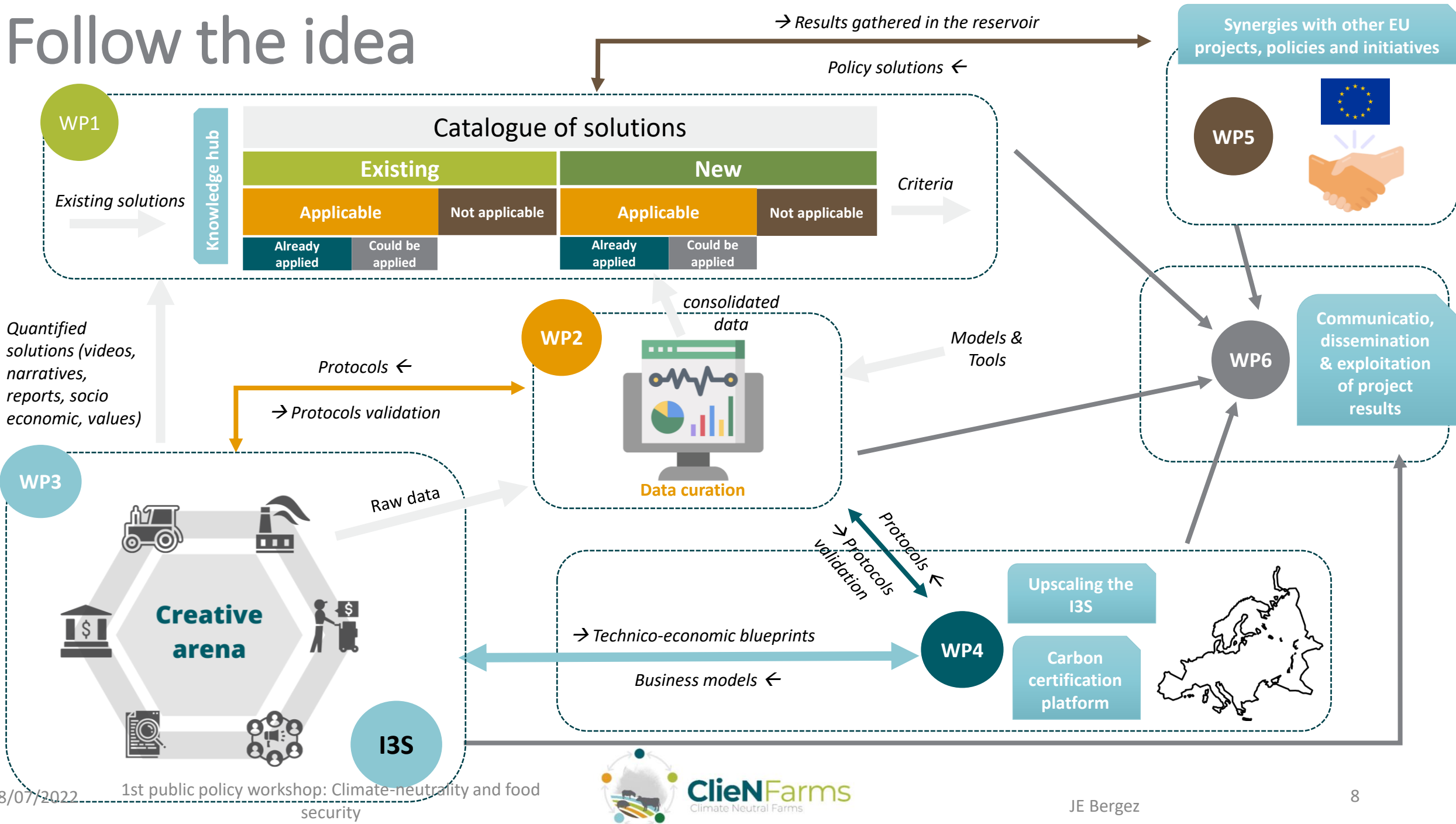
Overall concept

The goal of I3S is to develop business models that ensure the financial sustainability of the solutions, with an upscaling methodology.



TRL 5-6 : Demonstration Farms TRL 7: Lead Commercial Farms TRL 8: Outreach Farms

Follow the idea



NESTLE-UK&I-UNIVLEEDS

CRA-W

Danone

NESTLE-UA

Pedoclimatic regions

- Mediterranean
- Continental
- Mountain
- Oceanic

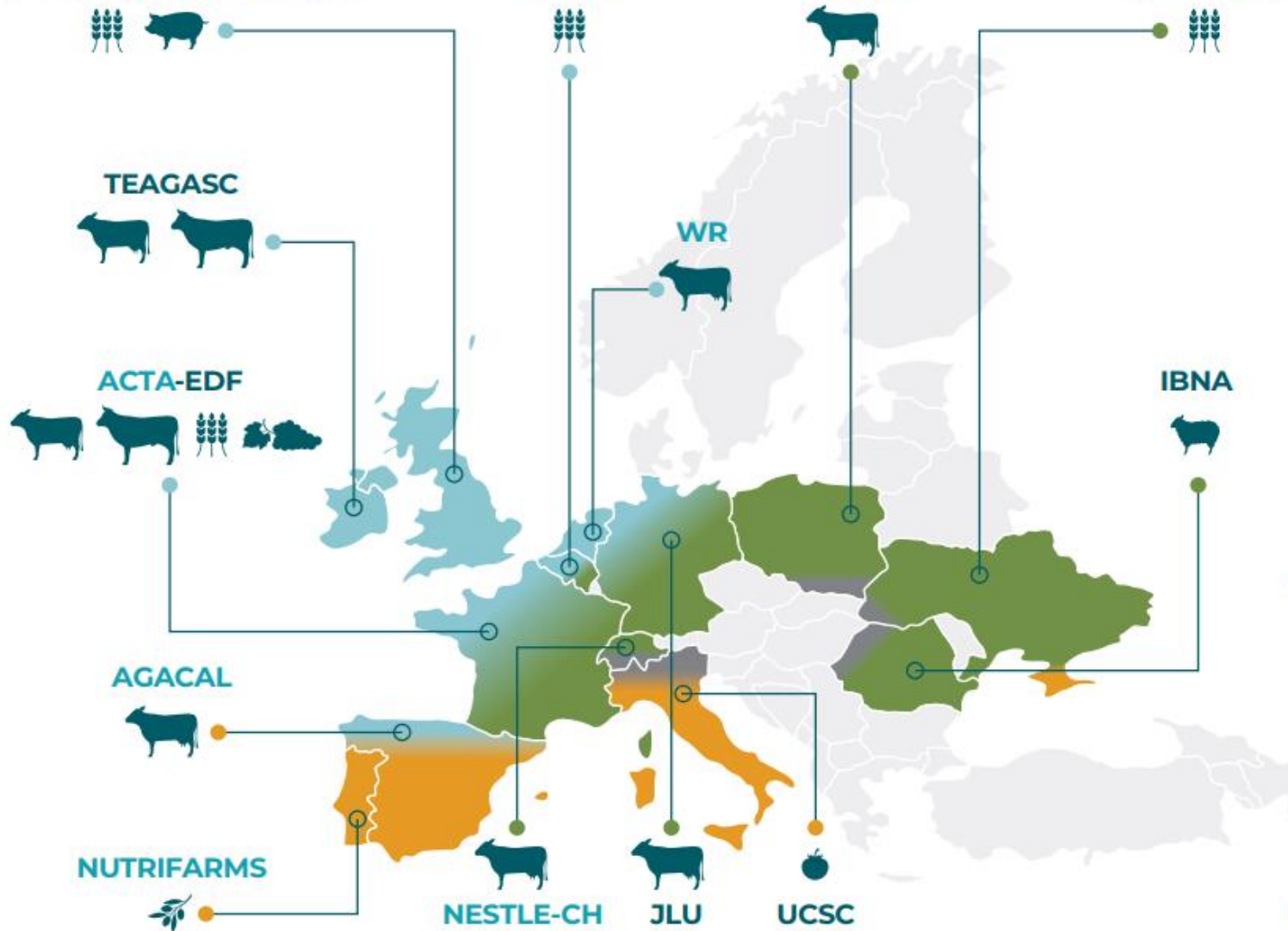
Production systems

- Dairy
- Monogastrics
- Arable crops
- Specialised culture
- Beef
- Sheep

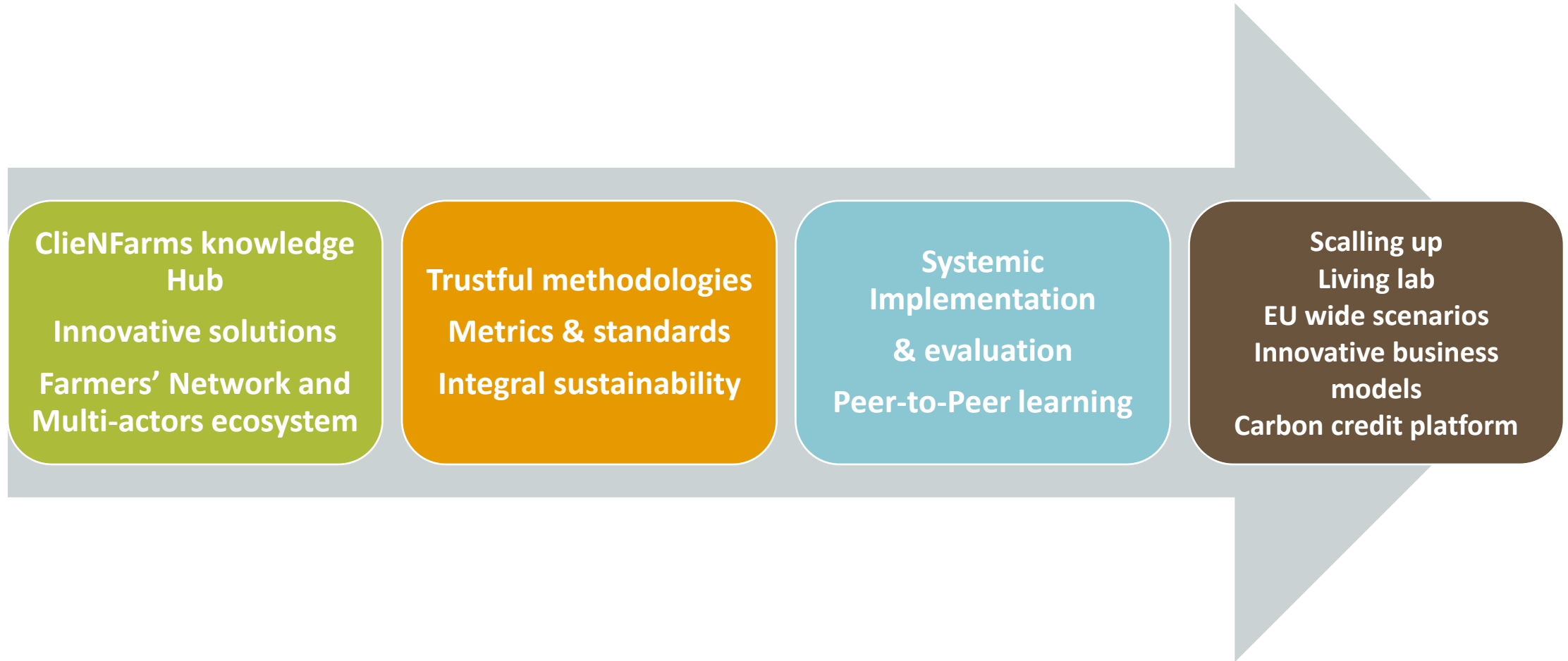
Partners in charge of I3S

ACTA; CRA-W; UNIVLEEDS; TEAGASC; EDF; JLU; UCSC; IBNA; AgResearch; WR

Supply chain involved
NESTLE-UK&I; AGACAL; NUTRIFARMS; NESTLE-CH; NESTLE-UA; Danone



General outputs



Expected Impacts



Providing sufficient, safe, nutritious, healthy and affordable food for all.



Improving the overall sustainability of food systems.



Improving the resilience of food systems to shock and stress.

Follow us on our digital channels!



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Thank you for your attention!

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AGACAL
AXENCIA GALEGA
DA CALIDADE ALIMENTARIA



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