Experimental & Collaborative Farm TERRASOLIS

World alfalfa Congress

Terrasolis

Engage the low-carbon transition of agriculture and territories.

A Collective

Network of 50 members

Collaborative projects

An experimental farm

220 ha

Partnerships

A Base

Bioenergy

Events

février 2025

Terrasolis

Founding and Benefactor Members

- CRISTAL UNION
- La Coopération Agricole
- Groupe Soufflet
- Bioeconomy for Change
- Vivescia
- Agricultures & Territoires – Chambre d'Agriculture Marne
- CCI Marne en Champagne
- Agricultures & Territoires – Chambre d'Agriculture Grand Est
- Agricultures & Territoires – Chambre d'Agriculture Ardennes
- Agricultures & Territoires – Chambre d'Agriculture Aube
- CA Nord Est
- InVivo
- FDSEA 51
- cder
- cérèsia

Agricultural Cooperatives & Traders

- La Coopération Agricole Luzerne de France
- Esternay
- NégoA
- Tereos
- La Chanvrière
- EMC2

Professional organizations

- Comité Champagne
- AGPB

Energy

- Haffner Energy
- CH4Process
- GRDF

Research & Training

- Terres Inovia
- Vinci Technologies
- Lycée LaSalle Reims-Thillois
- ARVALIS
- ITB Institut Technique de la Betterave
- Université de Reims Champagne-Ardenne
- ENSAIA
- RITTMO

Other companies

- UPL
- Roquette
- Artechdrone
- BASF We create chemistry
- MyEasy Farm
- France Carbon Agri
- ReSoil
- Exxact Robotics
- Cyclair

Think Tanks & Clusters

- agriDées
- Accustica

Finance & Management

- Groupama
- Cerfrance

Farmers & Experts

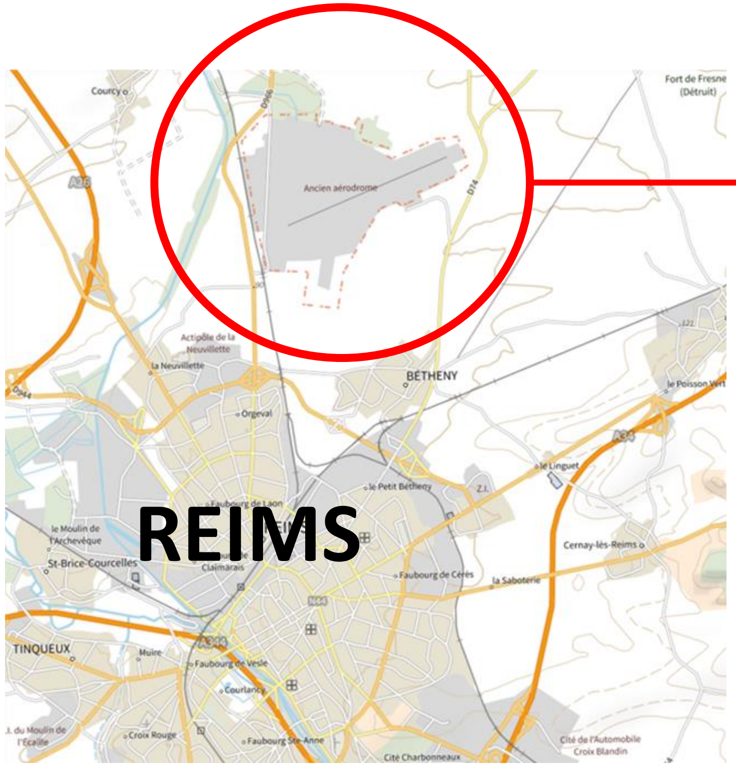
6 associated farmers

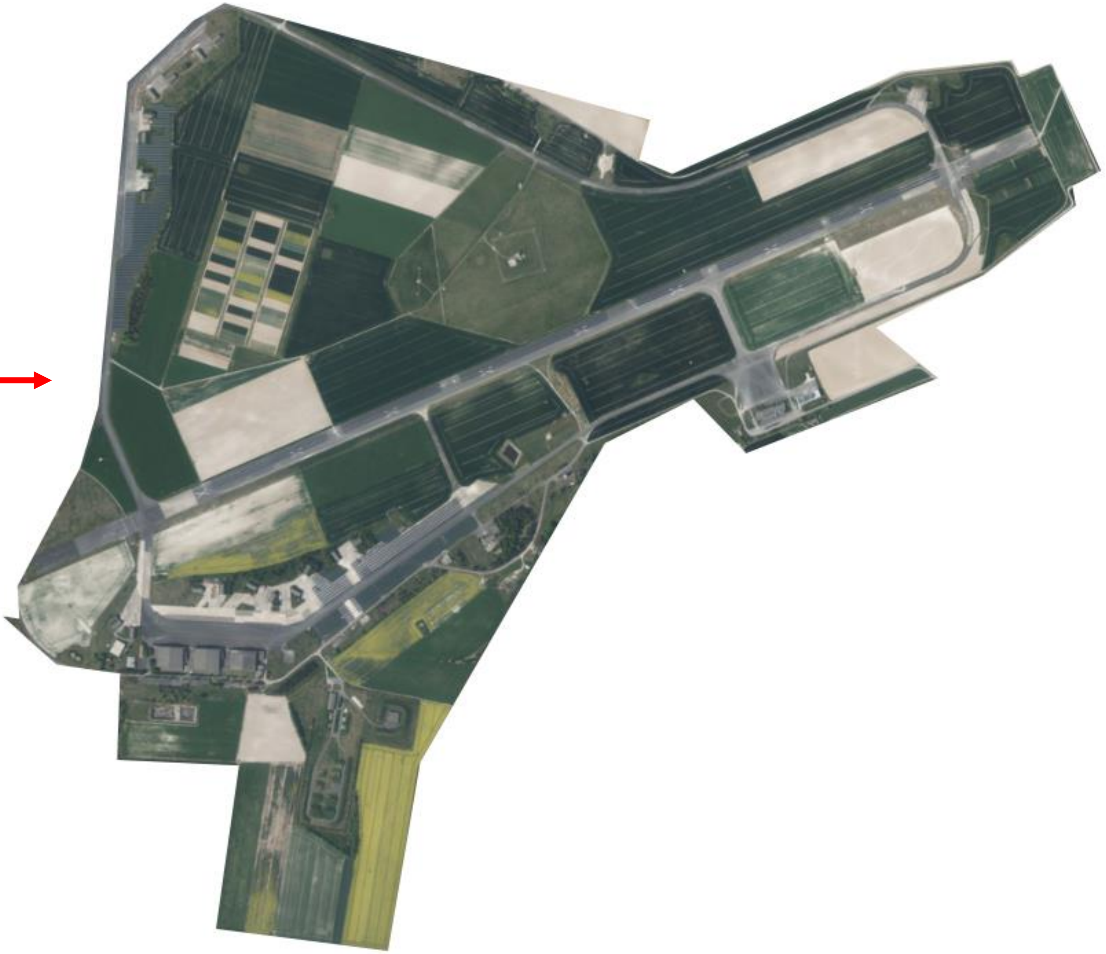
Experimental Farm

220 hectares

LOCALISATION

Old air base112

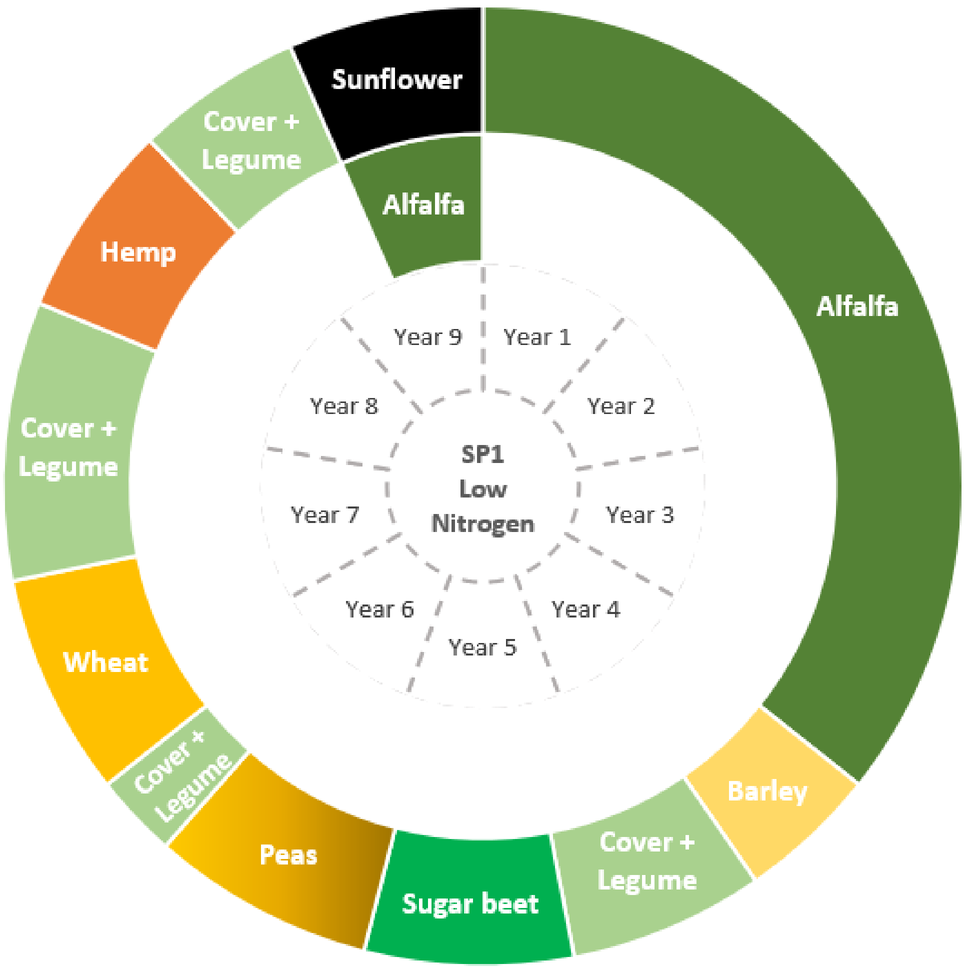




OUR VISION

- ❑ A decarbonized agriculture by 2050 : - 50% emissions and + 25% biomass
- ❑ An agriculture that preserves ecosystems and increases its agronomic potential
- ❑ Maintaining farms and our sectors in our territory
- ❑ Elected officials and companies supporting agriculture in its transition
- ❑ Citizens aware of environmental issues and food sovereignty

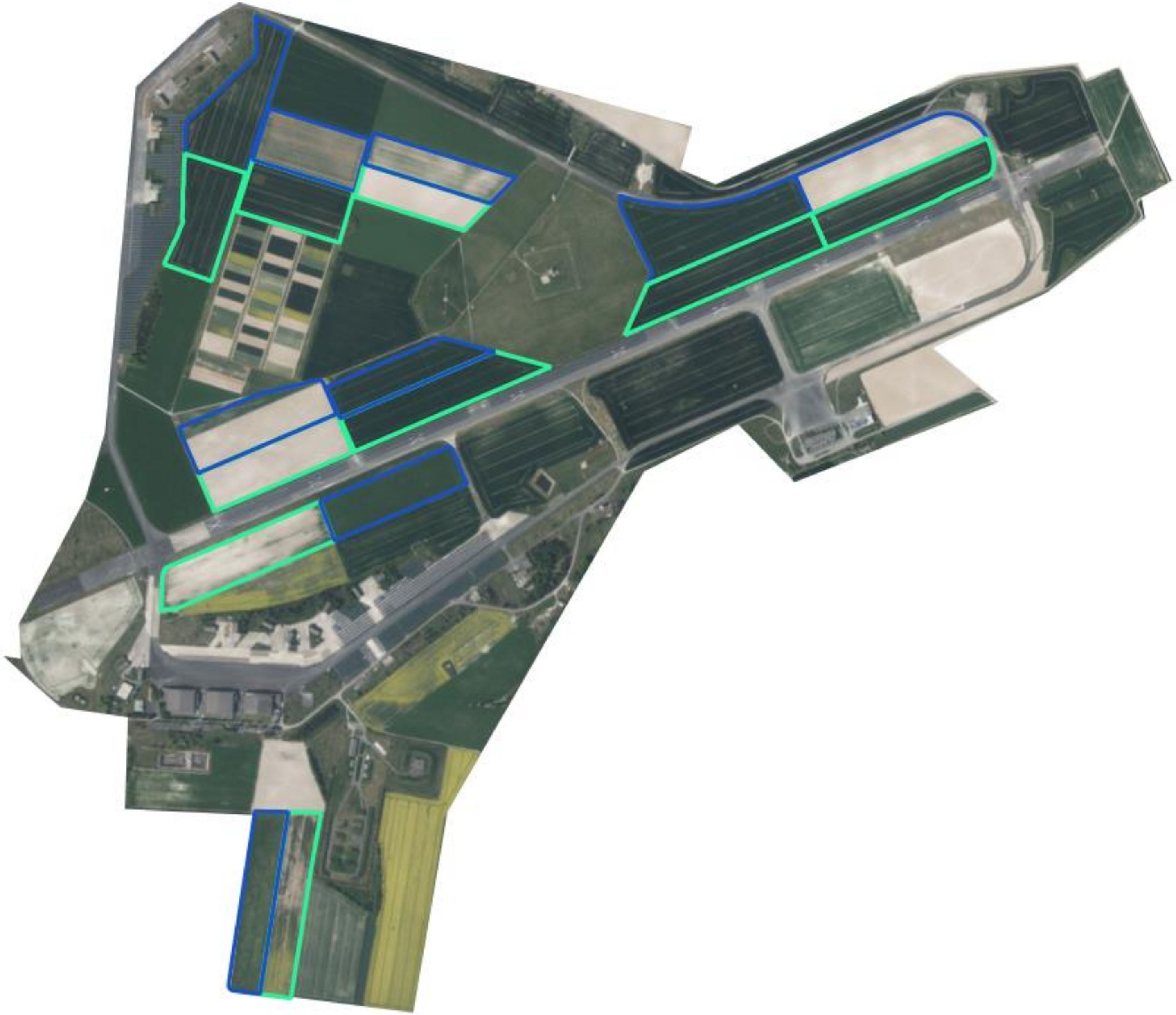
Two pilots systems in order to demonstrate technical feasability



Low nitrogen system : Low input cultures, légumes, organic fertilizers

Energy crop production for methanisation, digestate return

Experime



w Nitrogen
96ha - 9 fields

ıergy
,01ha - 9 fields

Alfalfa as a low carbon system tool:

Securize sowing

- Implement sunflower with alfalfa sooner than usual alfalfa sowing
- Produce sunflower in order to increase incomes

Maximise azote recycling

- Implement rapeseed just after alfalfa destruction in order to recycle Nitrogen

Produce energy crops

- Implement energy crop by direct sowing on the living alfalfa

Sowing : Sunflower was implemented just after alfalfa in the same day.

Growing : Sunflower grow fasterer than alfalfa and is higher.

Harvest : Harvest doesn't present particular difficulties. Result is lower than pure sunflower.

Improvement : Optimise fertilization and implement alfalfa around 2 weeks after sunflower

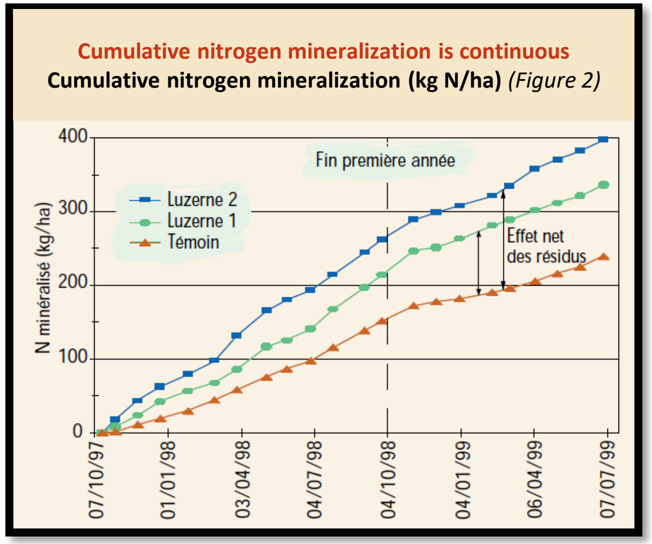
Alfalfa implementation: Alafafa was very well developped. Unfortunatly the production can't be sold in 2025 because of sunflower residues.

Harvesting : Alfalfa harvested three times in 2025

Sowing : Alfalfa was destroyed beggining of september. The rapeseed was sowed just after.

Nitrogen recycling : Rapeseed is the only winter crop that can use efficiently nitrogen from alfalfa mineralization.

Improvement: Destroy alfalfa sooner by canceling third harvest.



Nitrogen recycling : Alfalfa can produce around 50 kg nitrogen during the winter.

Sowing : Direct sowing on living alfalfa

Growing : Cereal grow during winter.

Harvesting : Cereal is harvested as a pure one. We can find 25% alfalfa in the mix. Then we can harvest alfalfa 2 or 3 times in the same year as a pure alfalfa.

TERRASOLIS
NEW LIVING VISION

Thanks for your attention

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