SPATIALISE

Enabling the regeneration of soils
through geospatial intelligence

WHY?

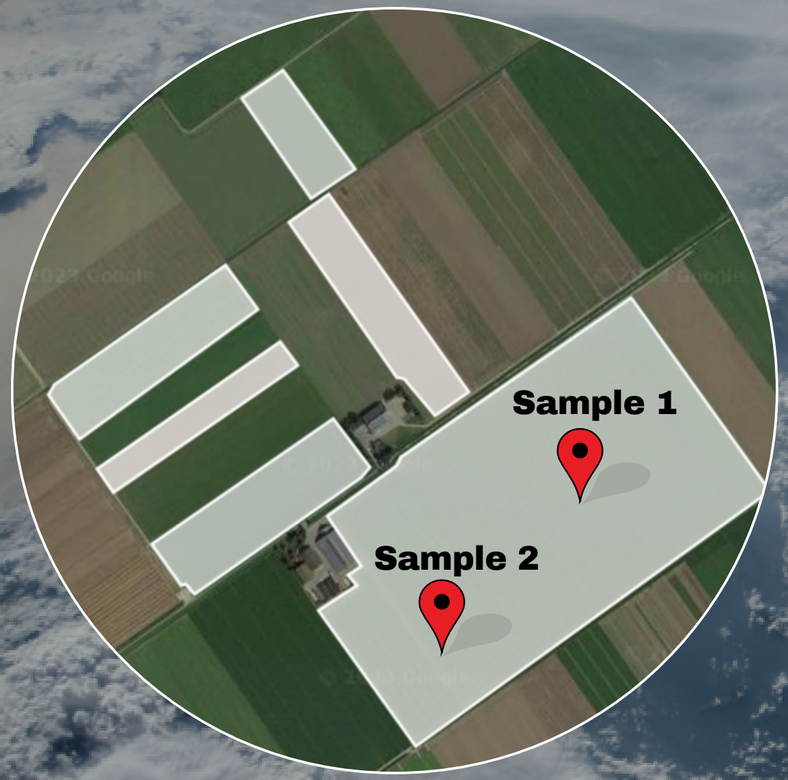
80% of our food is produced on arable lands

75% of farmland needs to be regenerated by 2045

90% of Corporate food value chain GHG emissions are in Scope 3*

* source: World Resource Institute

SOIL CARBON MONITORING NOW



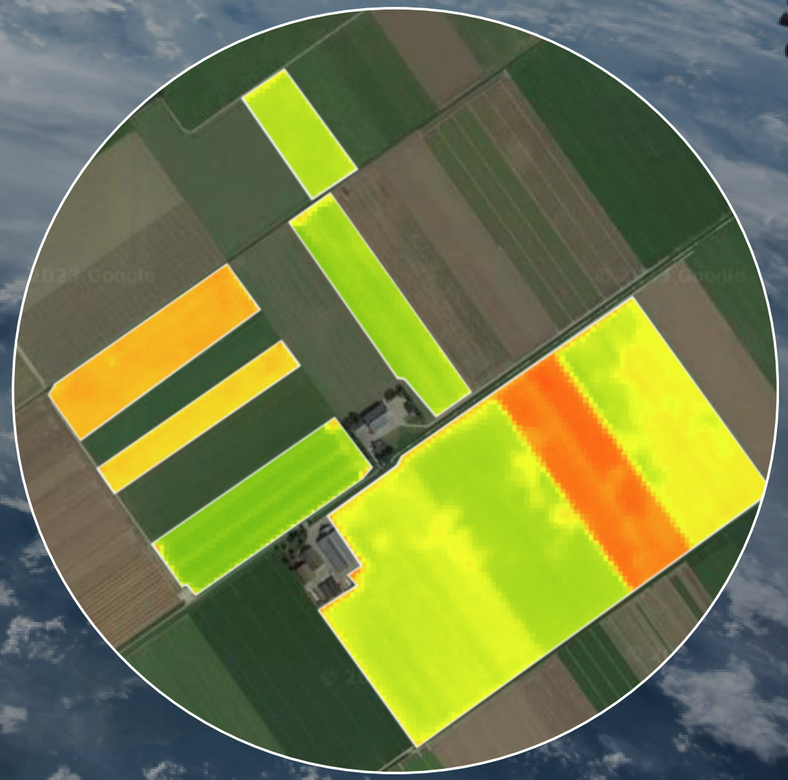
≤ $8.60 per hectare

1 week

Low resolution

Low reliability and accuracy

SPATIALISE SOIL CARBON MONITORING



85 % reliability

85 % accuracy

≤ $0.20 per hectare

5 minutes

Resolution 10 x 10m

Uncertainty quantification

SPATIALISE

HOW DOES IT WORK?

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
15 LIFE ON LAND

CURRENT | FUTURE

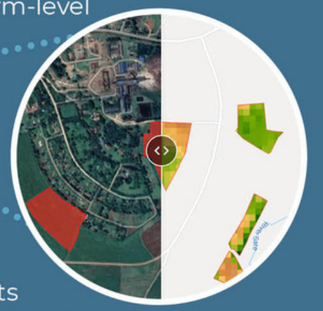
SOIL SAMPLING
- Costly
- Time consuming
- Not scalable

SATELLITE MONITORING
- Cost-effective
- Scalable to global coverage
- Near real-time information stream
- Extracting soil organic carbon features

+111 PARAMETERS
- Reflectance
- Climatic
- Morphometric
- Biological

MACHINE LEARNING
- Data driven representation of SOC
- State-of-the-art deep learning
- Optimal feature utilisation and representation
- Quantified estimation uncertainty
- Location-based calibration
- Higher spatial resolution

MONITORING OF SOIL ORGANIC CARBON
- Large-scale mapping on smallholder farm-level
- Reduction of soil sampling
- Historical information
- Real-time estimates



GAINS
- Reliable baselines remotely
- Fully automated: Data > Model > SaaS
- Scalability: No soil sampling, lower costs
- Accurate progress of land restoration initiatives

CUSTOMER SEGMENTS
- Climate friendly agriculture project developers
- Carbon footprint (in-setting) of food value chains
- Voluntary carbon marketplaces

Carbon in the atmosphere

Carbon in the soil

1 2 3 4 5 6 7 8 9 10 12 13 14 15 16 17 18 19 20

SOC (-)

yearly changing soil organic carbon content ⟶

SOC (+)

MARKET

Monitoring arable farming: $529 million industry

50.000 EU corporations will be obliged to report on their soil carbon levels through Scope 3

Increase of ≥ 50 million hectares owned by these corporations in the last years*

* source: Deloitte

REVENUE STREAMS

Standardised reports

Interactive dashboard subscription

Integrable API

dashboard.spatiali.se

dashboard.spatiali.se

Other Bookmarks

DASHBOARD

SPATIALISE

Follow this hyperlink to view the Spatialise soil carbon monitoring interface

Project: PROSOIL

Click below for

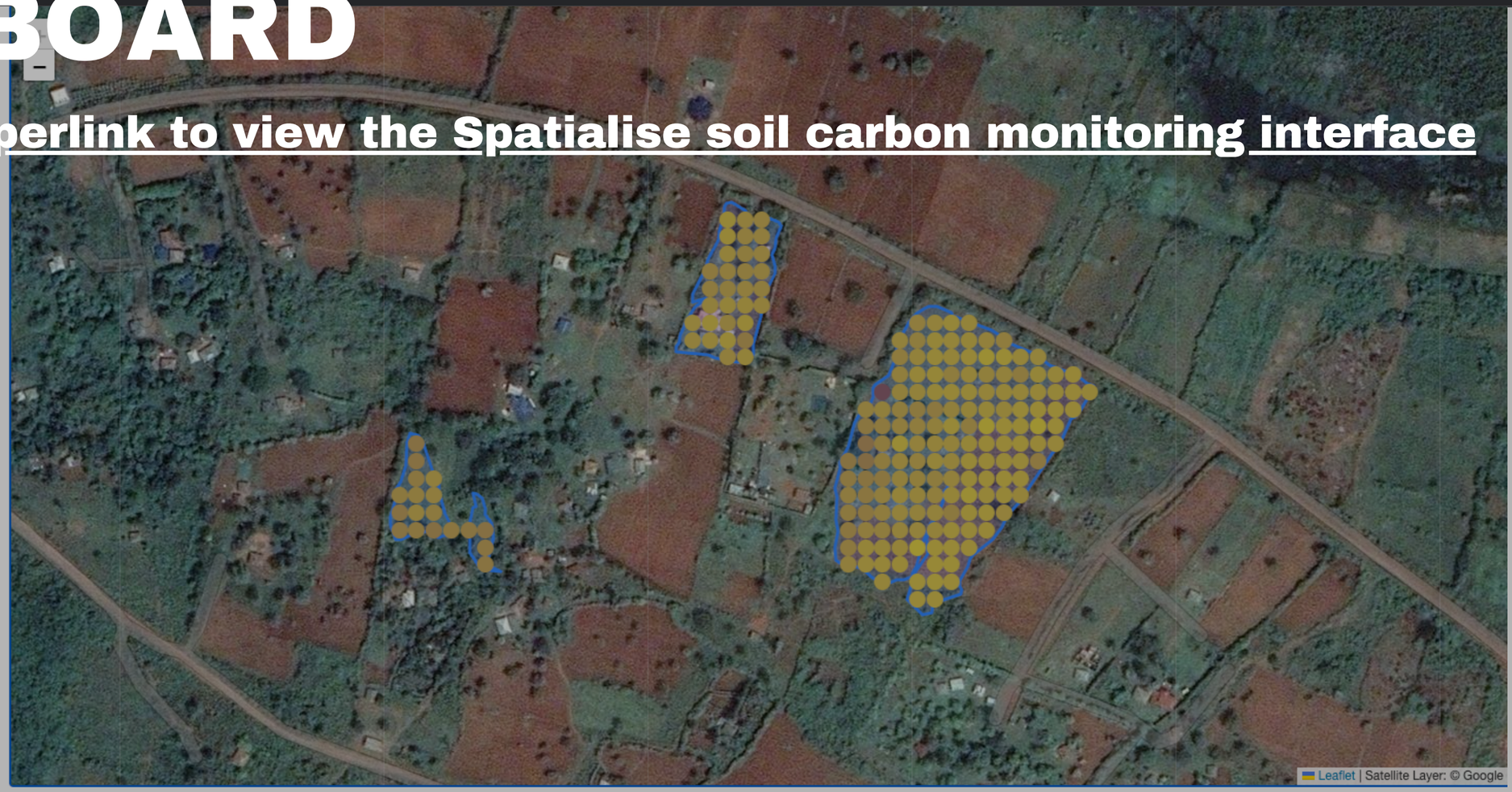
Project Report

Analysis

Notes

View results for year

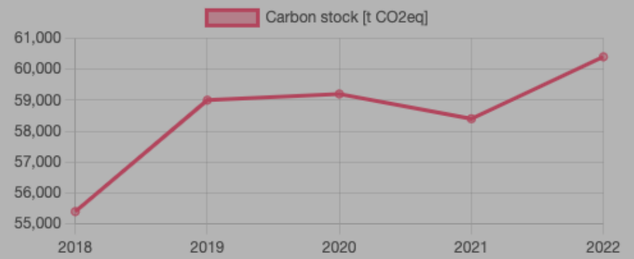
2022



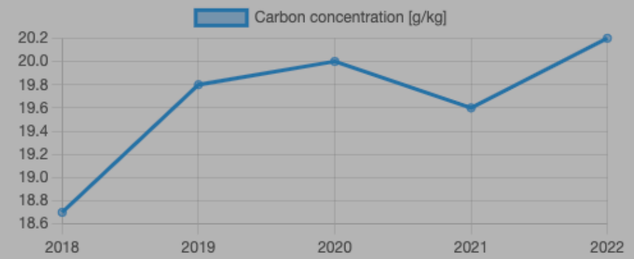
Aggregated Carbon Data

Year	Carbon stock [t CO2eq]	Carbon concentration [g/kg]
2018	55400	18.7
2019	59000	19.8
2020	59200	20
2021	58400	19.6
2022	60400	20.2

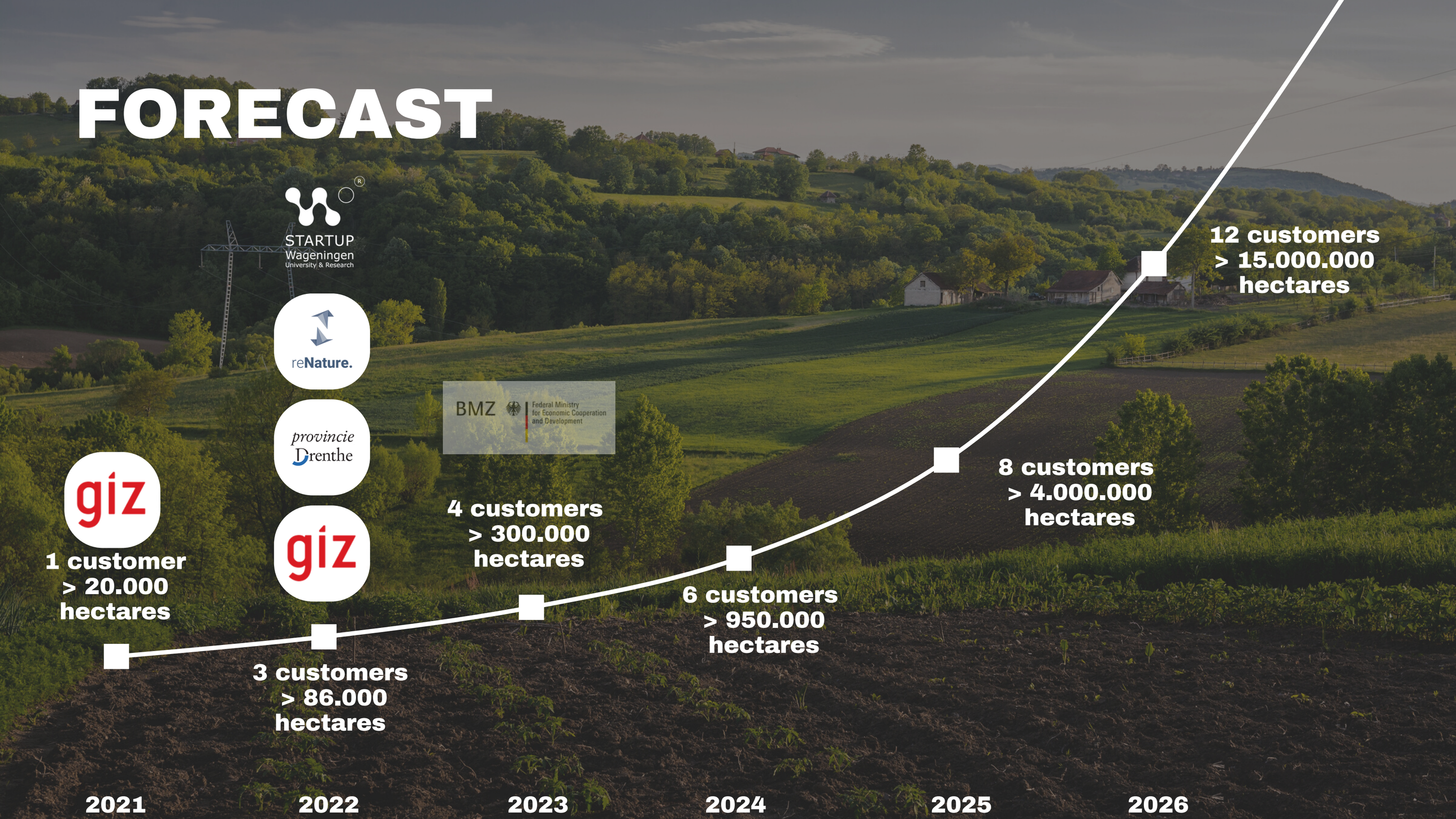
Carbon stock



Carbon concentration



FORECAST


STARTUP
Wageningen
University & Research
reNature.
provincie
Drenthe
giz
giz
BMZ
Federal Ministry
for Economic Cooperation
and Development
1 customer
> 20.000
hectares
3 customers
> 86.000
hectares
4 customers
> 300.000
hectares
6 customers
> 950.000
hectares
8 customers
> 4.000.000
hectares
12 customers
> 15.000.000
hectares
2021
2022
2023
2024
2025
2026

MILESTONES

Seed → Series-A

ESA co-funding
& Market-readiness

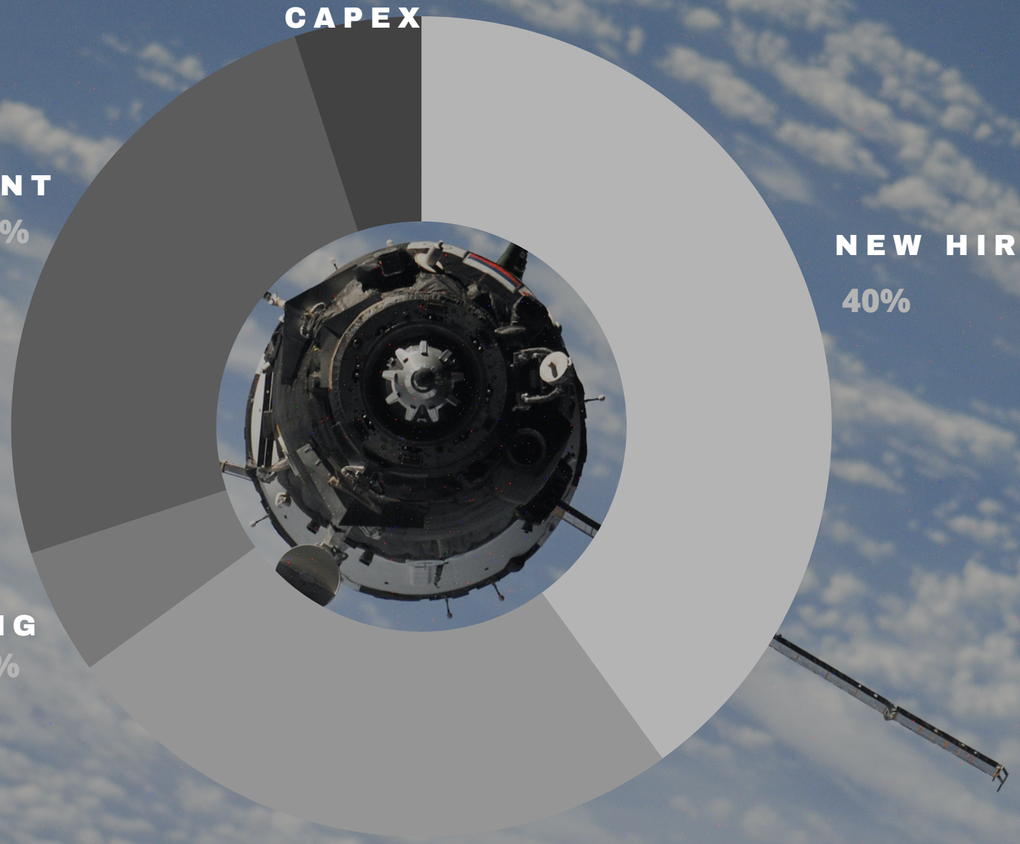
Accreditation:
ISAE 3000 Certification

ESA Demonstration Activity
& Launch for scale

4	6	8	12	# customers
2023	2024	2025	2026	

SPATIALISE SEED ROUND: $750,000 FOR 10-15% STAKE

INVESTMENT REQUEST



MEET OUR TEAM

Cathal Hastings
Cloud Engineer

Niels Janssens
Chief Technology Officer

Soufiane el Khinifri
Chief Executive Officer

PhD Nikolaj Takata Mücke
AI Lead

PhD Adithya Krishnan
Product Manager

Charlotte Viale
Business Development

Advisors

Ronald de Bruijn
CEO at Agrisim

Dr. ir. Gitte Schober
Team Entrepreneurship WUR

Dr. Markus Walsh
Senior soil scientist

Partners

Satelligence
4p1000
EUSPA
SCARF-network
ESA Worldsoils
Kuva Space
StartHub
EUSO

STARTUP
Wageningen
University & Research

LET'S MONITOR THE FIRST 10 MILLION HECTARES TOGETHER!