

Natural Capital Solutions Platform

Scalable parcel-to-portfolio intelligence for nature-positive land use management

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The ECOSYS Natural Capital Solutions (NCS) platform fuses IACS/LPIS, Copernicus Sentinel EO and in-situ data to deliver parcel-level ecosystem service valuation for arable and high-nature-value grasslands across Europe. Extending operational AMS capabilities (e.g., EOX AgriApp), NCS quantifies soil organic carbon sequestration, biodiversity connectivity and water regulation impacts from verified land management practices, translating them into EUR-denominated values for risk-adjusted, finance-grade decision-making.

Challenge

Nature-positive land use is still hard to scale because ecological value, risk, and management performance remain fragmented across datasets, actors, and reporting systems.

Why it matters

Farm-level nature value is often visible on the ground, but not yet translated into comparable, finance-relevant information.

Inputs

- IACS/LPIS Data
- Farm-Level Knowledge
- Ecological Classification
- Third Party/In-Situ Data

Solution

ECOSYS integrates geospatial, farm-level, and ecological data into a dashboard for screening, scoring, and managing NCS portfolios.

Users

Consultants, NGOs, project developers, public agencies, banks, insurers, corporates, and nature-finance actors

Outputs

- SaaS Cockpit
- API / data service
- Dynamic Reporting
- Verification/Certification

Portfolio Details

Parcel ID	Area in (ha)	BCFI Score	Crop Type	SOC content (t)	Carbon Sequestration per annum (in t)	Crop rotation (Points)	Catch crop (Name)	Tillage Reduction	Mulching	Grass/Flower Strip	Wooden Landscape Features	Grassy Landscapa Features
102316910	4.47	69.00	None	177	1.14	3	Mustard	13	5	5	15	25
103043236	4.09	77.00	Mustard	93	1.88	17	None	5	1	4	30	16
102376460	3.78	62.00	None	154	2.49	2	Mustard	12	8	3	20	17
103449127	2.83	63.00	Mustard	164	2.16	8	None	19	2	1	10	21
102157276	2.67	72.00	Mustard	114	1.26	6	Mustard	16	3	1	11	17
102624448	2.61	71.00	Mustard	55	1.33	13	Mustard	14	10	4	29	19

Portfolio Summary

Austria - Arable 3

Area in (ha): 108.82 ha

BCFI Score: 70.08 / 100

TEIV: € 326,423 p.a.

Bar chart showing scores for Biodiv: 55, CO2: 59, Soil: 54, Water: 42.

Portfolio Overview

My Portfolio:

- Arable - 1.2M
- Grassland - 1.1M
- Woodland - 78

Key Metrics:

- Total Area: 1,245
- Total BCFI: 11,347
- Total TEIV: 18.9M

Portfolio Overview

The portfolio overview dashboard aggregates key portfolio metrics into one operational view, enabling users to compare area, impact potential, and readiness across multiple projects, supporting fast screening, prioritisation, and navigation into more detailed parcel-level assessments.

Parcel discovery/screening

Browsing agricultural parcels spatially and identify relevant land areas for conservation, restoration, or regenerative land-use activities - making parcel status, availability, and ecological attributes visible in one interface for efficient opportunity screening and project origination.

Portfolio Design

Parcel ID: 102376460

Area: 3.78 ha

BCFI Score: 62.00

TEIV: € 113,327 p.a.

Map showing parcel location and surrounding areas.

Portfolio Design

Selected parcels can be aggregated into portfolios that are assessed at both parcel and portfolio level. This allows users to compare land units, build intervention and evaluate total areas, ecosystem condition & potential + expected impact value within one operational workflow.

Multi-benefit analytics

Structuring environmental performance across key benefit categories such as biodiversity, carbon, soil, and water. Its analytical logic is designed to make ecosystem services measurable, comparable, and usable for decision-making integrating the Biodiversity & Carbon Farming Index.

Reporting/Market Readiness

NCS Project & Portfolio Summary Report

Summary of converted parcels:

- CO2: 108.82
- TEIV: 326,423

Project Overview:

Project location map.

Reporting/Market Readiness

Turning land-based insights into reportable outputs for investors, corporates, public actors, and implementation partners. This includes portfolio summaries, indicator-based scoring, map-based evidence, and a pathway toward pre-certification, insetting, biodiversity credits, or other nature-finance use cases.

User Benefits:

- NBS Project Developers:** Scale projects faster with unified EO, parcel, and in-situ analytics plus BCFI-based valuation.
- Farmer Associations / NGOs:** Quantify conservation value per parcel to support fairer payments and scheme design.
- Agri-Tech / Experts:** Add nature-finance intelligence to existing agri-data for new market-ready service layers.
- Food Corporates:** Verify regenerative sourcing and manage biodiversity, soil, and water risks.
- Impact Investors:** Compare landscapes through risk-adjusted ecological value and build investable nature pipelines.
- Banks:** Integrate field-level nature risk and opportunity signals into agricultural portfolio management.

