



DEPARTMENT
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& FISHERIES

Geodataplatform for carbon farming in Flanders

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30/03/2023

Joint LIFE CarbonCounts and EJP Soil Webinar

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Development geodataplatform

▶ **Soil passport**

→ Digital platform

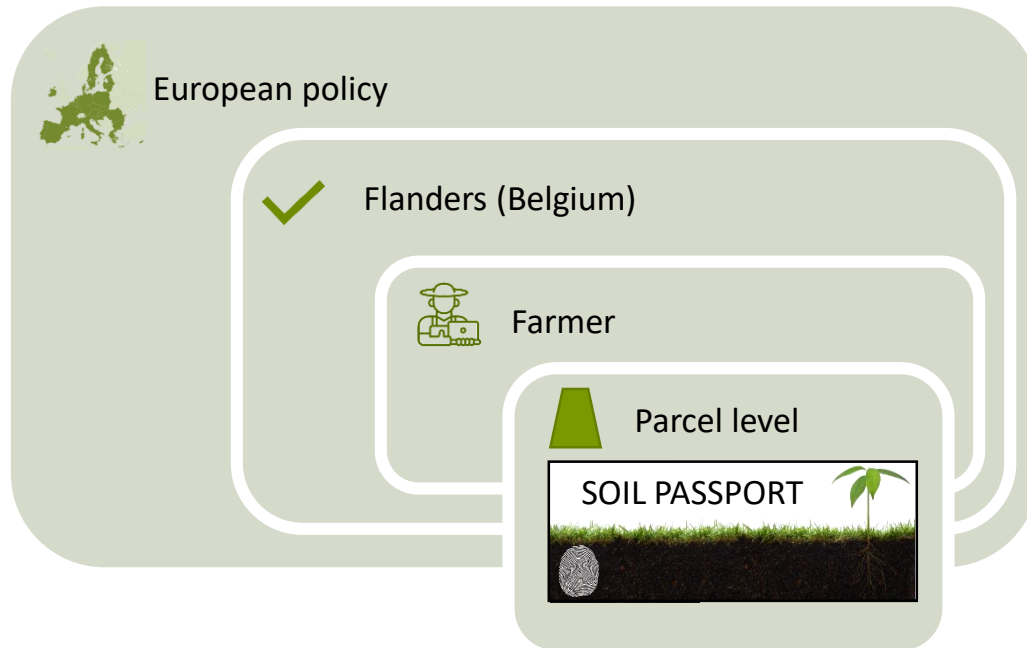
→ Data library for soil characteristics at parcel level

▶ **Carbon calculation tool**

→ User interface in soil passport

→ Calculation model - RothC

Soil passport – geodataplatform at parcel level



Soil passport – goal



GROUP AND VISUALISE OBJECTIVE
DATA



STIMULATE THE USE OF SOIL DATA
AND FACILITATE ADVISE

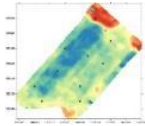


STRENGTHEN SOIL POLICY
NO CONTROL-TOOL

Soil passport – group data



Data from farmers



IACS data

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LPIS



Vlaamse
overheid

Public data



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Soil passport – visualise data



► Desktop and mobile-friendly

Algemeen Bodem Gewas Water

Perceelsinformatie Weer Locatie

Perceelsinformatie

Campagne	2022
Perceelsnummer	12
Referentieoppervlakte	1,38 ha
Hoofddeelt	60 - Grasland
Erosiecode	Rood
Afstroomzone 2022-2023	A0_VL05_67
Fosfaatklasse	Klasse I
Fosfaatklasse eindjaar	2025
Landbouwstreek	Zandleemstreek
Bio-gecertificeerd perceel	Nee

Weer

Het weer voor Geraardsbergen

Vandaag	10°	Morgen	13° 16°
		Zaterdag	10° 17°
		Zondag	12° 16°
		Maandag	14° 21°
		Dinsdag	16° 19°

Matige wind

Meer weer op www.meteo.be

Locatie

Dichtstbijzijnde adres	Taalmeers 15, 9500 Geraardsbergen
Google Maps	Klik hier
XY Coördinaten	113034;161971
WGS Coördinaten	N 50°46'01" E 03°50'41"

Algemeen Bodem Gewas Water

Bodemtype Erosie

Bodemtype

zand klei leem

zand leemig zand licht zandleem zandleem leem

zand klei leemig zand zware klei licht zandleem zandleem 100.0% leem

Erosie

Erosiecode (kleur) Rood

Erosiecode (kleur) Geel

Zoek op adr

100 m 02/03/2021 Luchtfoto 2021, voorjaar

Oppervlakte 1 ha 54 a 49 ca

Omtrek 674,05 m

Algemeen Bodem Gewas Water

Bodemtype **Erosie**

Erosiecode (kleur) Geel

Soil passport – facilitate advise



Carbon calculation tool - goal



FACILITATE ADVISE ON EFFECTS OF
CARBON FARMING PRACTICES

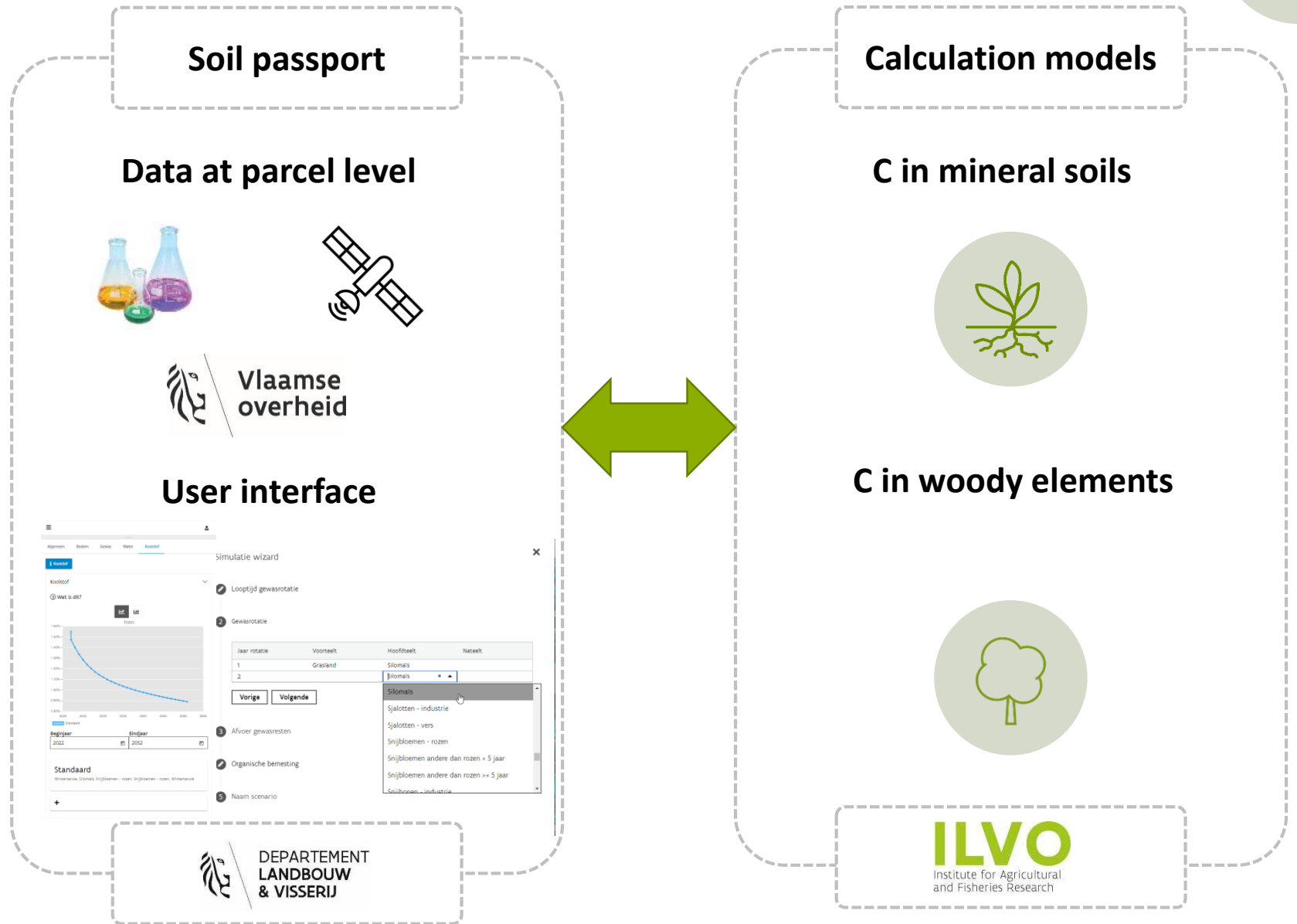


INFORM ON TURNOVER OF ORGANIC
CARBON IN THE SOIL



INFORM ON CARBON SEQUESTERED
BY WOODY ELEMENTS

Carbon calculation tool – data flow



Carbon calculation tool – Calculation models



C in mineral soils



Model

- RothC-based model
- Mineral soils
- Simulation %C for 30 years

Data input

Soil passport

- LPIS – crop history
- Texture
- Initial %C
- ...

Other

- Scientific research
- Climatic institute
- ...

C in woody elements



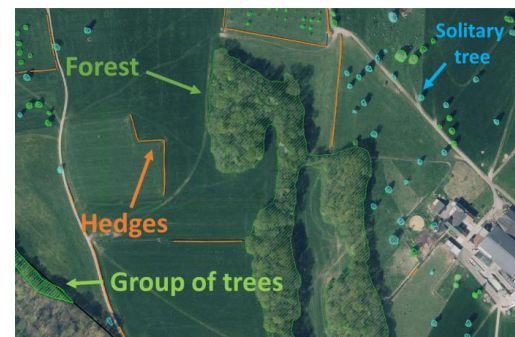
Model

- RothC – adapted
- %C and carbon stock
- CARAT-tool

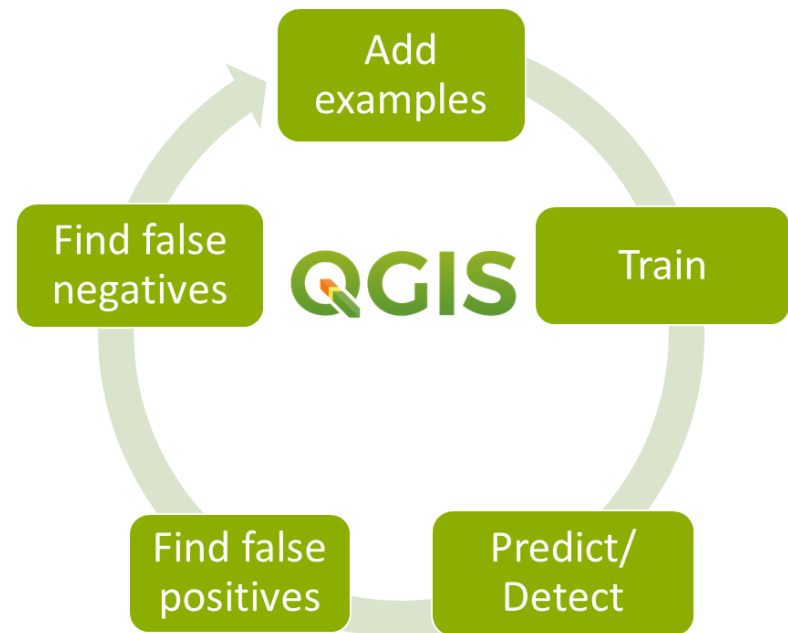
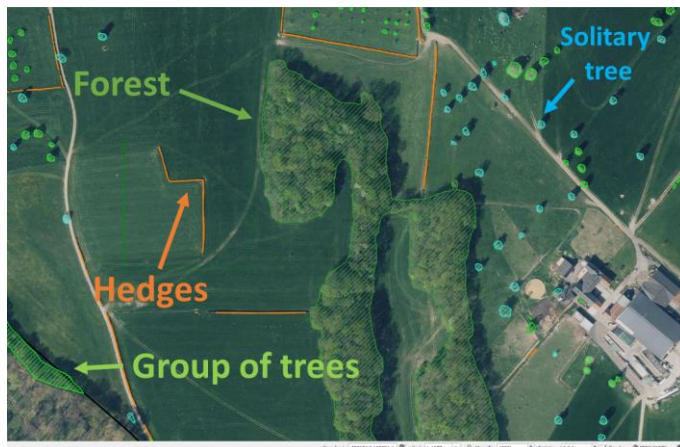
AGROFORESTRY
VLAANDEREN

Data input

- Aerial images with AI detection



Carbon calculation tool – Carbon stock in woody elements



LIFE CarbonCounts



▶ Geodataplatform

- Stien Beirinckx
- Laura De Mets
- Pieter Roggemans
- Lucas Van Dessel

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▶ Calculation models

- Greet Ruyschaert
- Paul Pardon
- Bert Reubens
- Kaat Mertens

