

Report on the carbon balance of HealtRec Ltd. developed by Wind of Change

Executive Summary

This report was commissioned by HealtRec Ltd. to Wind of Change and aims to evaluate the current state of the company from environmental point of view. It presents a comprehensive analysis of the carbon balance for the year 2024, encompassing both carbon sequestration and greenhouse gas emissions analysis.

The results of this report will serve for setting goals for further development of the company. HealtRec Ltd. aims at reinforcing its commitment to sustainable land practices, environmental accountability, and scientific transparency — values that align with its role as a trusted partner in waste management, ecological consulting, and industry support services.

Carbon Sequestration Assessment

An in-depth evaluation of carbon sequestration across three land plots, owned and managed by HealtRec Ltd was conducted. Using a multimodal approach the assessment integrated soil sampling, allometric biomass equations, drone imagery, and satellite-derived indices to model the carbon stock in the plots and to gain a picture into plant productivity and water stress levels.

Each plot exhibited distinct ecological characteristics, from grasslands to dense forest, requiring tailored sequestration calculations. Advanced remote sensing tools enhanced accuracy, particularly for inaccessible forested terrains. Additionally, calculations were made about the potential of yearly carbon sequestration by the wooded areas, based on scientific publications (Table 1). The result does not include carbon sequestration by soil systems and other vegetation type and potentially could be significantly higher.

Carbon stock				Carbon capture	Area
Cadastre accession number	Soil SOC stock,	Aboveground carbon, t	Soil + Biomass carbon, t	Aboveground carbon,	m²
57100.52.22	6.39	4.00	10.39	0.23	1,689
57100.52.11	4.61	0.93	5.55	0.37	1,640
57100.120.19	3.28	12.13	15.41	0.45	996
Total	14.28	17.06	31.34	1.05	4,325

Table 1. Carbon stock and Carbon sequestered in tones carbon for 2024.

Greenhouse gas emissions

Following the <u>Greenhouse Gas Protocol</u>, the total emission of CO₂ eq. were calculated. Data was gathered from the company financial documentation and the used emission factors were from the database "<u>Base Carbon</u>", which is compiled by the <u>French Agency for Environmental Transition</u>. Given the nature of the company, emission from indirect sources, i.e. emissions coming from purchased and sold goods and services, travel etc., represent the majority of the total carbon footprint (Figure 1).

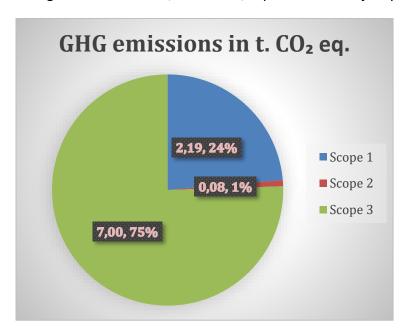


Figure 1. GHG emissions of HealtRec Ltd., 2024.

Recommendations

To further enhance carbon capture, the report advises:

- Agroecological Interventions: Promote biodiversity, reduce soil disturbance, and introduce techniques like Syntropic agriculture, integrate of woody vegetation and introduce of deeprooted perennial crops.
- **Monitoring Strategy:** Establish annual SOC and biomass monitoring, expand soil depth testing to 60 cm, and refine sampling design to reduce uncertainty.
- **Ecosystem Health:** Incorporate biodiversity and resilience assessments to ensure long-term sequestration viability.

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