

General information

Project name	Underground Forest Reeuwijk		
Project code	UGF008		
Remover	Underground Forest		
Location	Reeuwijk, Netherlands		
Area	0.06	ha	
Start year	2025		
Duration	>1000	years	Estimated permanence of removal and storage
Holding pool	20%		Freed up when project is implemented

Per project

Baseline TEC	3	tCO2	Above Ground carbon if removed for project
Reference capacity	62	tCO2	Capacity of CO2 storage
LCA emissions	2.59	tCO2	Project related emissions
Storage potential	56	tCO2	Projection -/- baseline

Removal certificates

Holding pool	11		
Potential units issued	45	CRCs	

Field Code	Field name	Size (ha)	Owner	Notes
002	Reeuwijk	0.0565	De heer Adrianus Johannes Maria de Goeij	

#	Field code	Field	Year	Date	Sample depth	SOC/AGB
001	002	Reeuwijk	2020	1-1-2020	-	AGB
003		#REF!	#REF!			
005		#REF!	#REF!			
006		#REF!	#REF!			
007		#REF!	#REF!			
008						
009						
010						
011						
012						

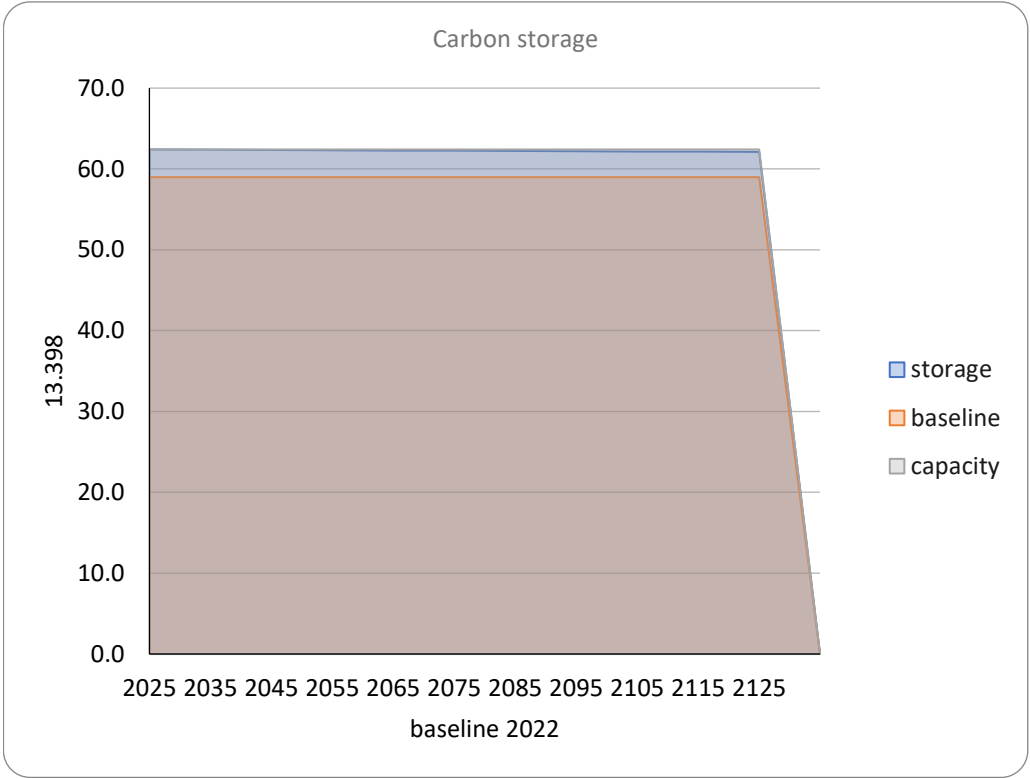
Carbon (g/kg)	AGB (tCO2/ha)	Sample/report nr.
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-	58.98	ESA baseline
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Carbon Calculation for UGF008

Surface	0.0565 ha	Fields tab
Baseline AGB	58.98 tCO2e/ha	Measurements tab
Capacity Reference	62.4 tCO2e	References tab

	storage	baseline	capacity
2025	62.4	58.98	62
2035	62.4	58.98	62
2045	62.3	58.98	62
2055	62.3	58.98	62
2065	62.3	58.98	62
2075	62.3	58.98	62
2085	62.2	58.98	62
2095	62.2	58.98	62
2105	62.2	58.98	62
2115	62.1	58.98	62
2125	62.1	58.98	62



Sources

value	source	URL	Notes
CEDA aboveground biomass carbon	https://climate	https://dataceda	2010-2020 data
SOC	A critical review of the conventional SOC to SOM conversion fac		
Density	Wageningen L	https://edepot.w	We've added these soil density le
From C to CO2	3.666666667		

Yearly degradation 0.00005 <https://www.shr> Klaassen, 2015

Variables	Unit	Source	Corrections
Density of spruce	460 kg/m³	https://www.wur	https://nmbu.bra
Spruce C content	50.35% C content	https://www.sciencedirect.com/scie	
Wood moisture content	12.70% water content	https://www.sciencedirect.com/scie	
CO2e per m3	754 kgCO2/m³	formula from:	https://opslagco2
Total volume of spruce	82.82 m3		
Total Underground CO2	62.4 tCO2		
Total amount of wood	38 t		

	Number	Pile length (cm)	Pile point	Volume per pile (m3)
palenplan	191	14.7	13.5	0.434
			0.0	
More lengths				

Mean point diameter (cm)	13.500	0.000	0.000	0.0
Increase per m (cm)	0.800	0.800	0.800	0.800
Pile length	14.7	0.0	0.0	0.0
Mean measurement point	7.350	0.000	0.000	0.000
Mean diameter	0.194	0.000	0.000	0
Volume pile	0.434	0.000	0.000	0.000
Piles per m3	2.306	#DIV/0!	#DIV/0!	#DIV/0!

tor (Geoderma, Volume 156, Issues 3–4, 15 May 2010, Pages 75-83)

levels to the calculation factors tab

<https://www.agriculturejournals.cz/pdfs/jfs/2007/03/05.pdf>

<https://doi.org/10.1016/j.sbsbs.2023.100001>

ence/article/pii/S0378112720310987

inhout.nl/motivatie#:~:text=Hout%2C%20afhankelijk%20van%20de%20soort,stoffen%20(2%2D15%25)

Volume sum

(m3)

83

Total emissions	2.59 tCO2
emissions forestry	0.92 tCO2
emissions transport	0.76 tCO2
emissions piling	0.91 tCO2

Emissions forestry

Wood production emission: 11.1 kgCO2/m3 <https://www.storaenso.com/-/med>

Emission pile driving

		912 kgCO2
Hours per day	8 hr/day	
Piles per day	110 piles/day	
Piles project	191 piles	
Days of work	2	2 days
w2w emissions (diesel)	3.2 kgCo2/l	
2t2 bensine	2.7 kgCo2/l	

Distance 30 km

Per project

Lowboy		
Lowyboy per km	0.5 l/km	
Diesel usage	30 l	96 kgCO2

per dag

Bus per km	0.07 /km	
Amount of days	2 days	
Bensin usage	8 l	43.84 kgCO2

Diesel per hour	4 diesel/hour	
Per day	32 l/dag	102.4 kgCO2
Chainsay	1 l/u	
Hours per day	1 hr/day	
Usage per day	1 hr/day	2.74 kgCO2

Per pile

Piles per hour	13.75 piles/hr	
Pile driver	15 diesel/hr	
Diesel per pile	1.09 diesel/pile	
Amount of machines	1 machines	
Usage per pile	1.09 l/pile	666.76 kgCO2

[ia/documents/download-center/certificates/wood-products-approvals-and-certificates/epd/stora-enso-epd-kvh-](#)

Transport emission 760 kgCO2

Manhay distance	273 km	Rue du Vicinal 2, Manhay
Empty outward trip	1.5 km	
Total	409.5 km	
Usage truck	3.45 km/l	
Usage diesel	119 l/rit	
Amount per trip	38 m ³	
Trips	2.2	
Trip rounded	2.0	
Total usage	237 l diesel	

fixed values
calculated fields
variable Rene
info transporter
info UF
fixed rene
fixed transport