General information

Remover name	Liesbeth van Bemmel		
Project code	FNL-L-001		
Project name	Voedselbos Benthuizen		
Location	Benthuizen		
Area	1,20	ha	
Duration	100	years	estimated permanence of removal and storage
Holding pool	20%		freed up when measurements confirm projection pathways
Project emissions	20%		LCA estimate, or specified when >20%

Per hectare

Baseline TEC	553	tCO2/ha	Above Ground, Below Ground and Soil Organic Carbon, following CDM AR-ACM0003
Reference capacity	792	tCO2/ha	Using CEDA and Soil sample data
Storage potential	239	tCO2/ha	Projection - baseline

Per project

Projected storage	287	tCO2	storage potential per ha x area
LCA emissions	57	tCO2	project related emissions
Net storage potential	229	tCO2	project storage - emissions over 20 years

Removal credits issued

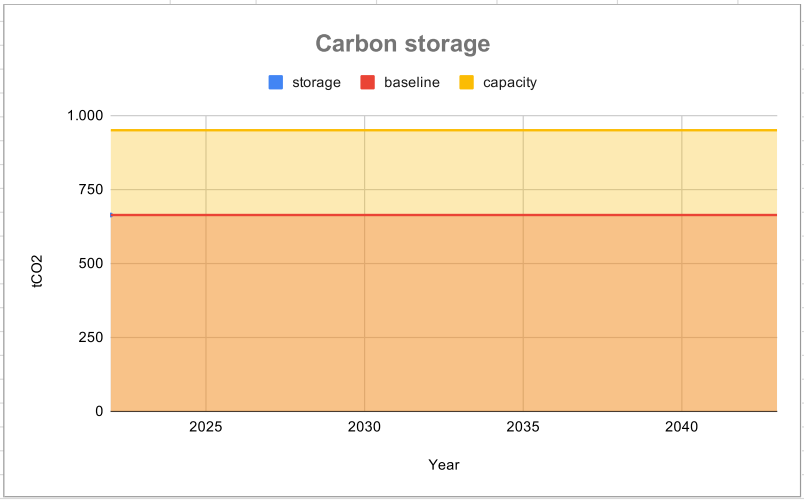
Credits first 12 years	138	credits	12/20 x net storage potential
Holding Pool	28	credits	20% of the first 12 years
Credits issued	110	credits	80% of the first 12 years

Field Code	Field name	Size (ha)	Owner
001	Voedselbos	1,2	Liesbeth
001-R	Reference		

#	Field code	Field	Year	Date	Sample depth	SOC/AGB	Carbon (g/kg)	AGB (tCO2/ha)	Sample/report nr.	Notes
001	001	Voedselbos	2023	11-4-2023	30	SOC	44		647049	
002	001-R	Reference	2023	20-2-2023	30	ref	60		647066	neighbouring plot beside the farm with no crops
005	001	Voedselbos	2020	1-1-2020	-	AGB		5,833		
006		#N/A	1899							
007		#N/A	1899							
009		#N/A	1899							
010		#N/A	1899							
011		#N/A	1899							
012		#N/A	1899							
013		#N/A	1899							
014		#N/A	1899							
015		#N/A	1899							

Year	Above Ground Biomass (Mg/ha)	Carbon (Mg/ha)	CO2 Equivalent (Mg/ha)
2010 ✅	6.017	3.008	11.030
2017 ✅	4.506	2.253	8.261
2018 ✅	3.569	1.785	6.544
2019 ✅	4.864	2.432	8.916
2020 ✅	3.182	1.591	5.833
Average	4.427	2.214	8.117

Carbon Calculation for		FNL-L-001								
Surface	1,2	ha	Fields tab							
Capacity Reference SOC	60,00	SOC g/kg	References tab							
Capacity Reference AGB	125,00	tCO2e/ha	References tab							
	2023		2026		2029		2032		2035	
Measurement average	44,00	SOC g/kg	#DIV/0!	SOC g/kg	#DIV/0!	SOC g/kg	#DIV/0!	SOC g/kg	#DIV/0!	SOC g/kg
Sample depth	30	cm	#DIV/0!	cm	#DIV/0!	cm	#DIV/0!	cm	#DIV/0!	cm
Calculation depth	30	cm	30	cm	30	cm	30	cm	30	cm
Soil density	1,13	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3
SOC (soil carbon) / ha	547	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha
AGB (above ground) / ha	5,83	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha
Storage current	663	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e
Storage capacity	950	tCO2e	950	tCO2e	950	tCO2e	950	tCO2e	950	tCO2e
	287									



Sources									
value	**source**	**URL**	Notes						
CEDA aboveground biomass carbon	https://climatee	https://datacedaa	2018 data						
SOC	A critical review of the conventional SOC to SOM conversion factor (Geoderma,Volume 156, Issues 3–4, 15 May 2010, Pages 75-83)								
Density	Wageningen Ur	https://edepot.wu	We've added these soil density levels to the calculation factors tab						
Reference data for capacity									
Reference description	Estimate based on https://bsssjournals.onlinelibrary.wiley.com/doi/full/10.1111/ejss.12193								
SOC (soil)	60,00	gC/kg	measurement from neighbouring plot with forest						
AGB (above ground)	125,00	tCO2e/ha	NMVB, 2023	https://www.voe					

from C to CO2	3,666666667		
soil density	% organic matter	% organic carbor	soil density
1,59	0,5	0,25	1,59
1,52	1,5	0,75	1,52
1,45	2,5	1,25	1,45
1,39	3,5	1,75	1,39
1,34	4,5	2,25	1,34
1,29	5,5	2,75	1,29
1,24	6,5	3,25	1,24
1,18	7,5	3,75	1,18
1,13	8,5	4,25	1,13
1,09	9,5	4,75	1,09
1,05	10,5	5,25	1,05
1,01	11,5	5,75	1,01
0,96	12,5	6,25	0,96
0,93	13,5	6,75	0,93
0,9	14,5	7,25	0,9
0,87	15,5	7,75	0,87
0,84	16,5	8,25	0,84
0,81	17,5	8,75	0,81
0,79	18,5	9,25	0,79
0,77	19,5	9,75	0,77
0,75	20,5	10,25	0,75
0,73	21,5	10,75	0,73
0,71	22,5	11,25	0,71
0,7	23,5	11,75	0,7
0,69	24,5	12,25	0,69
0,67	25,5	12,75	0,67
0,65	27	13,5	0,65
0,62	29	14,5	0,62
0,6	31	15,5	0,6
0,58	33	16,5	0,58
0,56	35	17,5	0,56
0,54	37	18,5	0,54
0,52	39	19,5	0,52
0,5	41	20,5	0,5
0,49	43	21,5	0,49
0,47	45	22,5	0,47
0,46	47	23,5	0,46
0,44	49	24,5	0,44