

General information

Remover name	Scheepsma Forestry		
Project code	SFP-L-001		
Project name	Scheepsma Forestry Paulownia		
Location	Opende, The Netherlands		
Area	4.69	ha	
Starting year	2025		
Duration	10	years	project duration
Biodiversity holding	0%		additional fruit trees have been planted
Holding pool	20%		freed up when measurements confirm projection pathways
Project emissions	20%		LCA estimate, or specified when >20%

Per hectare

Baseline TEC	375	tCO2/ha	Soil Organic Carbon and Above Ground Carbon, following CDM AR-ACM0003
Reference capacity	672	tCO2/ha	Using CEDA and Soil sample data
Storage potential	296	tCO2/ha	Projection -/- baseline

Per project

Projected storage	1,391	tCO2	storage potential per ha x area x storage duration 100 year equivalent
LCA emissions	278	tCO2	project related emissions
Net storage potential	1,112	tCO2	project storage -/- emissions over 20 years

Potential Carbon Removal Units

Units first 10 years	556	units	10/20 x net storage potential
Holding Pool	111	units	20% of the first 12 years
Biodiversity holding pool	0	units	
Potential units issued	445	units	

Field Code	Field name	Size (ha)	Owner	
A	Perceel Grootegast (GTG00) F	3.4915	Siepke Scheepsma	
B	Perceel Grootegast F 2700	1.203	Siepke Scheepsma	

Carbon Calculation for		SFP-L-001									
Surface	4.6945	ha	Fields tab								
Capacity Reference SOC	350	tCO2/ha	References tab								
Capacity Reference AGB	322	tCO2e/ha	References tab								
		2025		2028		2031		2034		2037	
Measurement average	26.10	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
Soil density	1.305	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3	#DIV/0!	g/cm3	
SOC (soil carbon) / ha	375	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	
AGB (above ground) / ha	0.65	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	#DIV/0!	tCO2e/ha	
Storage current	1,762	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e	#DIV/0!	tCO2e	
Storage capacity	3,152	tCO2e		9,462	tCO2e		9,462	tCO2e		9,462	tCO2e

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								
SOC (soil)	350	tCO2/ha	estimation based on https://esdac.jrc.ec.europa.eu/content/pan-european-soc-stock-agricultural-soils					
AGB (above ground)	322	tCO2e/ha						
CALCULATION								
Tree species	Shantong Pauli	Paulownia cultures						
Trees total number planted	4,642	paulownia trees						
Trees per hectare	989	trees/ha						
Damage percentage	1%	trees/y	corrected for replant (2% - 1% = 1%)			https://link.springer.com/article/10.1007/s11676-019-01021-9		
Regrowth after harvest	29.4%	trees/y	assuming a regrowth in 5 years of 80%					
Time first harvest	10	y						
Time successive harvests	10	y						
Harvest per harvest year	100%	trees/ha						
Wood volume per tree	1.0	m3						
Density dry	275	kg/m3	https://www.researchgate.net/publication/360278806_The_Influence_of_Age_on_the_Wood_Properties_of_Paulownia_tomentosa_Thunb_Steud					
CO2 stock trees 10 years	321.53	tCO2/ha	AGB and BGB					
AGB and BGB CO2 stock	y	#trees	vol/tree m3	vol/ha	% in roots/tops	dry matter	CO2 stock	
		trees/ha	m3	m3/ha	%	tons	tCO2/ha	
2,025	1	989	0.000	0	30%	0.00	0.00	
2,026	2	979	0.02	20	30%	7.00	12.83	
2,027	3	969	0.05	48	30%	17.32	31.76	
2,028	4	960	0.09	86	30%	30.87	56.60	
2,029	5	950	0.18	171	30%	61.13	112.07	
2,030	6	940	0.35	329	30%	117.67	215.73	
2,031	7	931	0.50	466	30%	166.42	305.10	
2,032	8	922	0.65	599	30%	214.18	392.67	
2,033	9	912	0.75	684	30%	244.66	448.55	
2,034	10	0	0.85	0	30%	0.00	0.00	
2,035	11	268	0.90	241	30%	86.26	158.14	
2,036	12	344	0.95	327	30%	116.89	214.30	
2,037	13	442	1.00	442	30%	157.96	289.60	
2,038	14	567	1.05	596	30%	212.93	390.37	
2,039	15	562	1.10	618	30%	220.84	404.87	
2,040	16	556	1.15	639	30%	228.57	419.04	
2,041	17	550	1.20	660	30%	236.12	432.89	
2,042	18	545	1.25	681	30%	243.50	446.42	
2,043	19	539	1.30	701	30%	250.71	459.63	
2,044	20	0	1.35	0	30%	0.00	0.00	

0.496	41.8	20.9	0.496
0.495	42	21	0.495
0.494	42.2	21.1	0.494
0.493	42.4	21.2	0.493
0.492	42.6	21.3	0.492
0.491	42.8	21.4	0.491
0.49	43	21.5	0.49
0.488	43.2	21.6	0.488
0.486	43.4	21.7	0.486
0.484	43.6	21.8	0.484
0.482	43.8	21.9	0.482
0.48	44	22	0.48
0.478	44.2	22.1	0.478
0.476	44.4	22.2	0.476
0.474	44.6	22.3	0.474
0.472	44.8	22.4	0.472
0.47	45	22.5	0.47
0.469	45.2	22.6	0.469
0.468	45.4	22.7	0.468
0.467	45.6	22.8	0.467
0.466	45.8	22.9	0.466
0.465	46	23	0.465
0.464	46.2	23.1	0.464
0.463	46.4	23.2	0.463
0.462	46.6	23.3	0.462
0.461	46.8	23.4	0.461
0.46	47	23.5	0.46
0.458	47.2	23.6	0.458
0.456	47.4	23.7	0.456
0.454	47.6	23.8	0.454
0.452	47.8	23.9	0.452
0.45	48	24	0.45
0.448	48.2	24.1	0.448
0.446	48.4	24.2	0.446
0.444	48.6	24.3	0.444
0.442	48.8	24.4	0.442
0.44	49	24.5	0.44

