

General information

Remover name	Rodolphe de Cande - SCI de Noyant la Gravoyere		
Project code	NLG-L-001		
Project name	Paulownia - de Noyant la Gravoyere		
Location	Noyant-la-Gravoyère, France		
Area	1.30	ha	
Starting year	2024		
Duration	10	years	project duration
Biodiversity holding	0		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	169	tCO2/ha	Soil Organic Carbon and Above Ground Carbon, following CDM AR-ACM0003
Reference capacity	719	tCO2/ha	Using CEDA and Soil sample data
Storage potential	550	tCO2/ha	Projection +/- baseline

Per project

Projected storage	715	tCO2	storage potential per ha x area x storage duration 100 year equivalent
LCA emissions	143	tCO2	project related emissions
Net storage potential	572	tCO2	project storage +/- emissions over 20 years

Potential Carbon Removal Units

Units first 10 years	286	units	10/20 x net storage potential
Holding Pool	57	units	20% of the first 10 years
Potential units issued	229	units	

Field Code	Field name	Size (ha)	Owner	
A	Paulownia pilot	1.3	SCI de Noyant la Gravoyere	
B				

Carbon Calculation for		NLG-L-001							
Surface	1.3	ha	Fields tab						
Capacity Reference SOC	350	tCO2/ha	References tab						
Capacity Reference AGB	369	tCO2e/ha	References tab						

Sources							
value	source	URL	Notes				
CEDA aboveground biomass carbon	https://climatee	https://dataceda	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 Uir https://edepot.wur.nl 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)	369	tCO2e/ha					
CALCULATION							
Tree species	NordMax21®	WeGrow Paulownia tree					
Trees total number planted	750	paulownia trees					
Trees per hectare	577	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	8.000	y					
Time successive harvests	8.000	y					
Harvest per harvest year	50%	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	368.52	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
	1	577	0.000	0	30%	0.00	0.00
	2	571	0.02	11	30%	4.08	7.49
	3	565	0.05	28	30%	10.11	18.53
	4	560	0.09	50	30%	18.01	33.02
	5	554	0.18	100	30%	35.66	65.38
	6	549	0.35	192	30%	68.65	125.86
	7	543	0.50	272	30%	97.09	178.00
harvest year (50%)	8	272	0.65	177	30%	63.11	115.70
	9	349	0.75	261	30%	93.48	171.39
	10	448	0.85	380	30%	136.02	249.36
			0				
harvest year (50%)	11	224	0.90	201	30%	72.01	132.02
	12	287	0.95	273	30%	97.58	178.90
	13	369	1.00	369	30%	131.87	241.76
	14	474	1.05	497	30%	177.75	325.88
	15	469	1.10	516	30%	184.36	337.99
harvest year (50%)	16	303	1.15	349	30%	124.68	228.58
	17	438	1.20	526	30%	187.89	344.46
	18	562	1.25	703	30%	251.26	460.65
	19	722	1.30	938	30%	335.47	615.04
	20	927	1.35	1251	30%	447.25	819.95

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

