

Project users	Project name	Design name	Tool name		
Mattias Hedstrom	Skellefteå LCA	Skellefteå In Situ F/	BREEAM Infrastructure LCA (CEEQUAL)		
Section	Resource	User input	Unit	Global warm	Acidification
A1-A3-full	Geotextile, generic	23575	m2	15662,35	51,58
A1-A3-full	Aggregate, from sta	36900	ton	95940	738
A1-A3-full	Aggregate, from sta	11916	ton	30981,6	238,32
A1-A3-full	Geotextile, generic	30297	m2	20094,08	65,84
A1-A3-full	Geotextile, generic	30297	m2	20094,08	65,84
A1-A3-full	HDPE flexible water	30297	m2	104188,22	497,98
A1-A3-full	HDPE flexible water	495	m2	1702,25	8,14
A1-A3-full	Geotextile, generic	2875	m2	1910,04	6,29
A1-A3-full	Cement based slurr	3960	m3	2594721,4	12817,92
A1-A3-full	Soil, loose wet den:	56000	ton	920,55	0,757
Subtotal for A1-A3-full:				2886214,6	14490,67
A4b	Soil, loose wet den:	56000	ton	21306,78	141,81
Subtotal for A4b:				21306,78	141,81
A4legs	Geotextile, generic	23575	m2	59,19	0,269
A4legs	Aggregate, from sta	36900	ton	53987,87	245,13
A4legs	Aggregate, from sta	11916	ton	17434,13	79,16
A4legs	Geotextile, generic	30297	m2	39,82	0,183
A4legs	Geotextile, generic	30297	m2	39,82	0,183
A4legs	HDPE flexible water	30297	m2	177,39	0,817
A4legs	HDPE flexible water	495	m2	2,9	0,0133
A4legs	Geotextile, generic	2875	m2	7,22	0,0328
A4legs	Cement based slurr	3960	m3	15922,06	73,33
Subtotal for A4legs:				87670,39	399,12
A5	Contaminated Soil '	5500	ton	1585310,1	595,29
A5	Contaminated Soil '	9500	ton	2730623,5	993,05
A5	Contaminated Soil '	40000	ton	11459070	4004,89
A5	Inert waste landfilli	28125	ton	429516,48	2658,26
A5	Geotextile, generic	23575	m2	0	0
A5	Aggregate, from sta	36900	ton	0	0
A5	Aggregate, from sta	11916	ton	0	0
A5	Geotextile, generic	30297	m2	2013,39	6,6
A5	Geotextile, generic	30297	m2	2013,39	6,6
A5	HDPE flexible water	30297	m2	10436,56	49,88
A5	HDPE flexible water	495	m2	170,52	0,815
A5	Geotextile, generic	2875	m2	0	0
A5	Cement based slurr	3960	m3	339383,65	1675,86
A5	Electricity, Sweden,	100000	kWh	5187,8	53,03
A5	Diesel, 100% fossil,	1381788	MJ	131408,04	0
A5	Diesel, HVO100 (20	1045234	MJ	17141,84	0
Subtotal for A5:				16712275	10044,28
Total:				19707466	25075,88

Eutrophication	Ozone Depletion	Formation of acid equivalents	Abiotic depletion potential (fossil fuels)	Abiotic depletion potential (minerals and metals)	Biogenic carbon dioxide	Use of net primary production	Hazardous waste
4,42	0,000118	4,74	0,0425	518077,77	0	153,24	29,42
1476	0,00262	62,73	0,107	1143900	0	206,64	188,19
476,64	0,000846	20,26	0,0346	369396	0	66,73	60,77
5,56	0,000154	6,07	0,0546	655167,92	0	196,93	37,81
5,56	0,000154	6,07	0,0546	655167,92	0	196,93	37,81
266,63	0,00641	139,87	0,266	3337598,4	0	1729,96	3605,34
4,36	0,000105	2,29	0,00434	54530,52	0	28,26	58,9
0,539	0,0000144	0,578	0,00518	63180,22	0	18,69	3,59
2621,06	0,062	57,12	0,681	53813566	0	42372	0,0202
0,571	0,0000582	0,0432	0	0	0	0	1,37
4861,34	0,0725	299,76	1,25	60610585	0	44969,37	4023,24
35,59	3,52E-12	15,41	0,00158	291967,79	0	19,05	0,0136
35,59	3,52E-12	15,41	0,00158	291967,79	0	19,05	0,0136
0,0585	0,0000117	0,00381	0,428	1700,78	0	0	0,000231
53,32	0,0107	3,48	390,81	1551335	0	0	0,211
17,22	0,00344	1,12	126,2	500967,71	0	0	0,0681
0,0399	7,86E-06	0,00225	0,288	1135,75	0	0	0,000156
0,0399	7,86E-06	0,00225	0,288	1135,75	0	0	0,000156
0,178	0,000035	0,01	1,28	5059,89	0	0	0,000693
0,00291	5,72E-07	0,000163	0,021	82,67	0	0	0,0000113
0,00713	1,42E-06	0,000465	0,0523	207,41	0	0	0,0000282
15,97	0,00314	0,898	115,34	454170,02	0	0	0,0622
86,84	0,0173	5,52	634,72	2515795	0	0	0,342
1795,07	0,0202	427,03	822,44	2123952,4		1430,5	0,1
3092,92	0,0334	737,17	1365,24	3450735,2		2470,86	0,144
12984,39	0,133	3101,72	5471	13437131		10403,6	0,455
750,57	0,102	103,03	952,18	10779136		756,56	6,17
0	0	0	0	0		0	0
0	0	0	0	0		0	0
0	0	0	0	0		0	0
0,56	0,0000162	0,607	0,0343	65630,37		19,69	3,78
0,56	0,0000162	0,607	0,0343	65630,37		19,69	3,78
26,68	0,000644	13,99	0,155	334265,83		173	360,53
0,436	0,0000105	0,229	0,00253	5461,32		2,83	5,89
0	0	0	0	0		0	0
342,81	0,00847	7,54	15,08	7054805,7		5508,36	0,0107
13,72	0,00019	2,46	0,0912	920830		1079,7	391,45
0	0	0	0	0		0	0
0	0	0	0	0		0	0
19007,72	0,299	4394,39	8626,26	38237578		21864,78	772,31
23991,48	0,388	4715,08	9262,23	101655926	0	66853,2	4795,91

Non hazard	Radioactive	Mass of radioactive material	Question	Comment	Cost item	Service life	CESMM4	Resource selection
653,85	0,0781	7355,4	Geotechnic	ALTECH GE		As building	Not selected	Plastic material
4428	1,29	36900000	Geotechnic	Bärlager 0-32. Svevia		As building	notSelected	Sand, soil and gravel
1429,92	0,417	11916000	Geotechnic	Byggande av vallar Bär		As building	notSelected	Sand, soil and gravel
840,29	0,1	9452,66	Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
840,29	0,1	9452,66	Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
11058,4	3,45	42112,83	Geotechnic	Byggande av vallar. Prox	30		notSelected	Plastic material
180,67	0,0564	688,05	Geotechnic	VA-Arbeten. Proxy. Ge	30		notSelected	Plastic material
79,74	0,00952	897	Geotechnic	VA-Arbeter		As building	Not selected	Plastic material
2197,8	653,4	5940000	Geotechnic	Inblandning bindemed	30		notSelected	Tile adhesive
6923,17	16,3	56000000	Masses soil	Rena muddringsmassa		As building	notSelected	Sand, soil and gravel
28632,13	675,21	1,11E+08						
44,82	0,363	56000000	Masses soil	Rena muddringsmassa		As building	notSelected	Sand, soil and gravel
44,82	0,363	56000000						
0,18	0,0066	7355,4	Geotechnic	ALTECH GE		As building	Not selected	Plastic material
164,34	6,02	36900000	Geotechnic	Bärlager 0-32. Svevia		As building	notSelected	Sand, soil and gravel
53,07	1,94	11916000	Geotechnic	Byggande av vallar Bär		As building	notSelected	Sand, soil and gravel
0,121	0,00444	9452,66	Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
0,121	0,00444	9452,66	Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
0,54	0,0198	42112,83	Geotechnic	Byggande av vallar. Prox	30		notSelected	Plastic material
0,00883	0,000324	688,05	Geotechnic	VA-Arbeten. Proxy. Ge	30		notSelected	Plastic material
0,022	0,000805	897	Geotechnic	VA-Arbeter		As building	Not selected	Plastic material
48,5	1,78	5940000	Geotechnic	Inblandning bindemed	30		notSelected	Tile adhesive
266,91	9,78	54825959						
5500078	2,87		Constructive	Mudderma			Not selected	Mineral waste
9500112	4,1		Constructive	Mudderma			Not selected	Mineral waste
40000355	12,99		Constructive	Mudderma			Not selected	Mineral waste
28125400	58,26		Constructive	Skyddslage Rivning			notSelected	Mineral waste
0	0		Geotechnic	ALTECH GE		As building	Not selected	Plastic material
0	0		Geotechnic	Bärlager 0-32. Svevia		As building	notSelected	Sand, soil and gravel
0	0		Geotechnic	Byggande av vallar Bär		As building	notSelected	Sand, soil and gravel
84,04	0,0105		Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
84,04	0,0105		Geotechnic	Byggande av vallar Sky	30		notSelected	Plastic material
1105,89	0,347		Geotechnic	Byggande av vallar. Prox	30		notSelected	Plastic material
18,07	0,00568		Geotechnic	VA-Arbeten. Proxy. Ge	30		notSelected	Plastic material
0	0		Geotechnic	VA-Arbeter		As building	Not selected	Plastic material
292,02	85,17		Geotechnic	Inblandning bindemed	30		notSelected	Tile adhesive
9181,7	17,13		Site electric	El totalt			Not selected	Electricity
0	0		Site fuel cost	Omräknat 39172.5l Diesel	Verkligt	notSelected	Oil based fuel	
0	0		Site fuel cost	Omräknat 31201 l HVO 100	Beslut	notSelected	Oil based fuel	
83136711	180,9							
83165655	866,25	2,22E+08						

Uni class	CSI master Constructi	Occurrence	Original cl	Environme	Resource	Transformation
P7	7			One Click L	Geotextile, generic	
P3	31			EPD aggreg	Aggregate, from stationary crushir	
P3	31			EPD aggreg	Aggregate, from stationary crushir	
P7	7			One Click L	Geotextile, generic	
P7	7			One Click L	Geotextile, generic	
P7	7			EPD 1m2 o	HDPE flexible waterproof membra	
P7	7			EPD 1m2 o	HDPE flexible waterproof membra	
P7	7			One Click L	Geotextile, generic	
P7	9			EPD WEBEI	Cement based slurry, waterproofir	
P3	31			One Click L	Soil, loose wet density	
P3	31			One Click L	Soil, loose v Barge (average) (+A1)	
P7	7			One Click L	Geotextile, Dumper truck, 19 ton c	
P3	31			EPD aggreg	Aggregate, Dumper truck, 19 ton c	
P3	31			EPD aggreg	Aggregate, Dumper truck, 19 ton c	
P7	7			One Click L	Geotextile, Trailer combination, 40	
P7	7			One Click L	Geotextile, Trailer combination, 40	
P7	7			EPD 1m2 o	HDPE flexik Trailer combination, 40	
P7	7			EPD 1m2 o	HDPE flexik Trailer combination, 40	
P7	7			One Click L	Geotextile, Dumper truck, 19 ton c	
P7	9			EPD WEBEI	Cement ba Trailer combination, 40	
ste					Contaminated Soil Waste to landfi	
ste					Contaminated Soil Waste to landfi	
ste					Contaminated Soil Waste to landfi	
ste					Inert waste landfilling	
P7	7			One Click L	Geotextile, generic	
P3	31			EPD aggreg	Aggregate, from stationary crushir	
P3	31			EPD aggreg	Aggregate, from stationary crushir	
P7	7			One Click L	Geotextile, generic	
P7	7			One Click L	Geotextile, generic	
P7	7			EPD 1m2 o	HDPE flexible waterproof membra	
P7	7			EPD 1m2 o	HDPE flexible waterproof membra	
P7	7			One Click L	Geotextile, generic	
P7	9			EPD WEBEI	Cement based slurry, waterproofir	
P8	1			LCA study f	Electricity, Sweden, 2019	
P8	1			Boverket, v	Diesel, 100% fossil, CO2 only	
P8	1			Boverket, v	Diesel, HVO100 (2023), CO2 only	

-) ton capacity, 100% fill rate (+A1&A2)
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