Workplace EV Chargepoints Project Financial Business Case Summary - 20 year loan period

Project Summary

Capital Cost	£99,460
Year 1 Cost Savings & Revenues	£2,091
Payback period (years)	17.63
Cost to charge (p/kWh) - from 2021	22.70
IRR	3.80%
NPV	£8,092

Capital Costs

Chargepoint Unit	£31,873
Trenching & Cabling (inc	
labour)	£57,524
Bay marking & signage	£12,475
Total	£101,872
Contingency	£10,187.25
WCS Grant	£12,600
Grand Total	£99,460

Operating Costs & Loan Balance for all EVCs

	Operations &			Electricity			Borrowing Cost	s	
	Maintenance Costs	Back Office	Insurance			Replacement EVC unit	Interest	Repayment of principal	TOTAL
Year	£	£	£	kWh	£		£	£	£
2021-22	£13,500	£12,258	£3,000	8,963	£1,573		£2,148	£0	£32,479
2022-23	£0	£0	£3,000	15,357	£2,769		£2,041	£4,973	£12,783
2023-24	£0	£0	£3,000	26,096	£4,835		£1,933	£4,973	£14,741
2024-25	£4,624	£4,198	£3,000	43,745	£8,327		£1,826	£4,973	£26,948
2025-26	£4,751	£4,314	£3,000	71,738	£14,031		£1,719	£4,973	£32,788
2026-27	£4,882	£4,432	£3,000	113,724	£22,855		£1,611	£4,973	£41,754
2027-28	£5,016	£4,554	£3,000	171,704	£35,457		£1,504	£4,973	£54,504
2028-29	£5,154	£4,680	£3,000	243,257	£51,614		£1,396	£4,973	£70,816
2029-30	£5,295	£4,808	£3,000	320,255	£69,820		£1,289	£4,973	£89,185
2030-31	£5,441	£4,941	£3,000	391,808	£87,768		£1,182	£4,973	£107,304
2031-32	£5,591	£5,076	£3,000	449,788	£103,527		£1,074	£4,973	£123,241
2032-33	£5,744	£5,216	£3,000	491,774	£116,303	£ 41,807	£967	£4,973	£178,010
2033-34	£5,902	£5,359	£3,000	519,767	£126,304		£859	£4,973	£146,398
2034-35	£6,065	£5,507	£3,000	537,416	£134,184		£752	£4,973	£154,481
3035-36	£6,232	£5,658	£3,000	548,155	£140,629		£644	£4,973	£161,137
2036-37	£6,403	£5,814	£3,000	554,549	£146,182		£537	£4,973	£166,909
37-38	£6,579	£5,974	£3,000	558,306	£151,220		£430	£4,973	£172,175
38-39	£6,760	£6,138	£3,000	560,496	£155,988		£322	£4,973	£177,181
39-40	£6,946	£6,307	£3,000	561,768	£160,641		£215	£4,973	£182,082
40-41	£7,137	£6,480	£3,000	562,505	£165,275		£107	£4,973	£186,973
41-42	£7,333	£6,658	£3,000	562,505	£169,820		£0	£4,973	£191,785

Loan Balance
£
£99,460
£99,460
£94,487
£89,514
£84,541
£79,568
£74,595
£69,622
£64,649
£59,676
£54,703
£49,730
£44,757
£39,784
£34,811
£29,838
£24,865
£19,892
£14,919
£9,946
£4,973
£0

Savings & Revenue for all EVCs

	Revenues - Fees to charge		
	Fee to use Charegpoints		
Year	£		
2021-22	£2,091		
2022-23	£3,680		
2023-24	£6,426		
2024-25	£11,068		
2025-26	£18,650		
2026-27	£30,379		
2027-28	£47,128		
2028-29	£68,603		
2029-30	£92,802		
2030-31	£116,659		
2031-32	£137,605		
2032-33	£154,587		
2033-34	£167,880		
2034-35	£178,354		
3035-36	£186,921		
2036-37	£194,301		
37-38	£200,997		
38-39	£207,335		
39-40	£213,520		
40-41	£219,679		
41-42	£225,720		

Potential furth this project co			
Fuel Use by pool Cars	Pool car carbon savings	Grey Fleet carbon savings	TOTAL potential additional savings
£	£	£	£
£0	£0	£65	£65
£5,972	£1,196	£112	£7,281
£6,136	£1,216	£194	£7,546
£6,305	£1,235	£330	£7,871
£6,479	£1,254	£550	£8,283
£6,657	£1,274	£886	£8,816
£6,840	£1,293	£1,358	£9,491
£7,028	£1,312	£1,953	£10,293
£7,221	£1,332	£2,608	£11,161
£7,420	£1,351	£3,237	£12,008
£7,624	£1,476	£4,062	£13,162
£7,833	£1,602	£4,818	£14,253
£8,049	£1,727	£5,491	£15,267
£8,270	£1,853	£6,090	£16,213
£8,498	£1,978	£6,632	£17,108
£8,731	£2,103	£7,135	£17,970
£8,971	£2,229	£7,612	£18,812
£9,218	£2,354	£8,072	£19,644
£9,472	£2,480	£8,521	£20,472
£9,732	£2,605	£8,964	£21,301
£10,000	£2,605	£8,971	£21,576

		Net Revenue	Project Balance		Payback period
Year		£			
	2021	-£99,460	£		17.63
	2022	-£30,389	-£	129,848	_
	2023	-£4,129	£-	133,978	
	2024	-£3,342	£-	137,320	
	2025	-£10,907	£-	148,227	
	2026	-£9,165	-£	157,392	
	2027	-£6,402	-£	163,793	
	2028	-£2,403	£-	166,196	
	2029	£2,760	-£	163,436	
	2030	£8,590	-£	154,846	
	2031	£14,328	-£	140,519	
	2032	£19,337	-£	121,182	
	2033	-£18,450	£-	139,632	
	2034	£26,455	-£	113,177	
	2035	£28,846	-£	84,331	
	2036	£30,757	-£	53,574	
	2037	£32,365	-£	21,209	
	2038	£33,795	£	12,586	
	2039	£35,127	£	47,713	
	2040	£36,411	£	84,124	
	2041	£37,679	£	121,803	
IRR		3.80%			1
NPV		£8,092			

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