

Scenario 1 (SAP Results): 100% self-consumption and installation of PV on 100% of usable roof space

Table 1: (SAP) Scenario 1: 100% self-consumption and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	38,850	168	38,850	14.4	660,831	5.6%	£59,748	£7,343	8.14
2	The Plaza	257,526	156.5	111,995	447	111,995	41.5	145,531	43.5%	£158,973	£21,167	7.51
5	Causeway Exchange	431,155	76.7	37,832	219	37,832	14.0	393,323	8.8%	£77,886	£7,150	10.89
7	Adelaide House	576,450	91.4	70,181	261	70,181	26.0	506,269	12.2%	£92,823	£13,264	7.00
13	Belfast City Council	925,435	299.6	151,062	856	151,062	56.0	774,373	16.3%	£304,431	£28,551	10.66
14	Ulster Hall	248,217	165.9	115,056	474	115,056	42.7	133,161	46.4%	£168,575	£21,746	7.75
15	Cecil Ward	466,475	19.3	6,914	55	6,914	2.6	459,561	1.5%	£19,560	£1,307	14.97
16	St Georges Market	218,861	270.2	181,376	772	181,376	67.3	37,485	82.9%	£274,557	£34,280	8.01
17	Shankill Leisure Centre	401,128	212.8	179,429	608	179,429	66.6	221,699	44.7%	£216,231	£33,912	6.38
18	Grove Wellbeing Centre	783,600	743.8	682,559	2,125	682,559	253.2	101,041	87.1%	£755,743	£129,004	5.86
19	Duncrue Complex	958,477	566.0	529,345	1,617	529,345	196.3	429,132	55.2%	£575,076	£100,046	5.75
20	Ozone Leisure Centre	194,093	615.3	552,133	1,758	552,133	204.8	- 358,040	284.5%	£625,222	£104,353	5.99
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	174,522	554	174,522	64.7	- 8,209	104.9%	£197,027	£32,985	5.97

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	41,478	165	41,478	15.4	287,453	12.6%	£58,681	£7,839	7.49
23	Morton Community Centre	54,447	98.7	83,816	282	83,816	31.1	- 29,369	153.9%	£100,292	£15,841	6.33
25	Department for Communities Offices, James House	111,361	134.4	126,134	384	126,134	46.8	- 14,773	113.3%	£136,567	£23,839	5.73
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	490,568	182.0	- 107,740	128.1%	£490,077	£92,717	5.29
28	Public Records Office of Northern Ireland	963,163	207.6	185,068	593	185,068	68.6	778,095	19.2%	£210,897	£34,978	6.03
35	106-108 Holywood Road	149,447	33.6	26,279	96	26,279	9.7	123,168	17.6%	£34,142	£4,967	6.87
43	Royal Victoria Hospital - New Maternity	989,645	169.1	124,810	483	124,810	46.3	864,835	12.6%	£171,776	£23,589	7.28
44	Royal Victoria Hospital - Kelvin	366,106	401.1	297,328	1,146	297,328	110.3	68,778	81.2%	£407,568	£56,195	7.25

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	181,033	598	181,033	67.1	4,228,485	4.1%	£212,675	£34,215	6.22
48	Belfast City Hospital - Multi Storey Car Park 2	- no data	454.0	320,010	1,297	320,010	118.7	- 320,010	- no data	£461,270	£60,482	7.63
49	Belfast City Hospital - Multi Storey Car Park 1	- no data	483.4	420,344	1,381	420,344	155.9	- 420,344	- no data	£491,144	£79,445	6.18
51	Mater Hospital - McAuley	1,133,827	292.6	266,714	836	266,714	98.9	867,113	23.5%	£297,318	£50,409	5.90
52	Mater Hospital - Dempsey	2,426,201	12.6	9,761	36	9,761	3.6	2,416,440	0.4%	£12,803	£1,845	6.94
53	Mater Hospital - Dorrian	522,942	67.2	40,855	192	40,855	15.2	482,087	7.8%	£68,284	£7,722	8.84
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	530,276	1,848	530,276	196.7	636,998	45.4%	£657,230	£100,222	6.56
58	Ulster Museum	1,031,844	263.2	217,327	752	217,327	80.6	814,517	21.1%	£267,444	£41,075	6.51
69	Anon ID: 1	3,588	4.2	2,712	12	2,712	1.0	876	75.6%	£4,268	£987	4.32
70	Anon ID: 2	3,588	4.9	3,356	14	3,356	1.2	232	93.5%	£4,979	£1,222	4.08
71	Anon ID: 3	3,588	5.6	4,200	16	4,200	1.6	- 612	117.1%	£5,690	£1,529	3.72

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	7.7	3,206	22	3,206	1.2	382	89.4%	£7,824	£1,167	6.70
73	Anon ID: 5	3,588	4.2	2,904	12	2,904	1.1	684	80.9%	£4,268	£1,057	4.04
74	Anon ID: 6	3,588	4.9	3,178	14	3,178	1.2	410	88.6%	£4,979	£1,157	4.30
75	Anon ID: 7	3,588	5.6	4,272	16	4,272	1.6	- 684	119.1%	£5,690	£1,555	3.66
76	Anon ID: 8	3,588	5.6	4,280	16	4,280	1.6	- 692	119.3%	£5,690	£1,558	3.65
77	Anon ID: 9	3,588	4.2	3,168	12	3,168	1.2	420	88.3%	£4,268	£1,153	3.70
78	Anon ID: 10	3,588	5.6	3,608	16	3,608	1.3	- 20	100.6%	£5,690	£1,313	4.33
79	Anon ID: 11	3,588	5.6	3,608	16	3,608	1.3	- 20	100.6%	£5,690	£1,313	4.33
80	Anon ID: 12	3,588	5.6	3,608	16	3,608	1.3	- 20	100.6%	£5,690	£1,313	4.33
81	Anon ID: 13	3,588	5.6	3,608	16	3,608	1.3	- 20	100.6%	£5,690	£1,313	4.33
82	Anon ID: 14	3,588	5.6	3,608	16	3,608	1.3	- 20	100.6%	£5,690	£1,313	4.33
83	Anon ID: 15	3,588	5.6	3,624	16	3,624	1.3	- 36	101.0%	£5,690	£1,319	4.31
84	Anon ID: 16	3,588	5.6	4,128	16	4,128	1.5	- 540	115.1%	£5,690	£1,503	3.79
85	Anon ID: 17	3,588	7.0	4,736	20	4,736	1.8	- 1,148	132.0%	£7,113	£1,724	4.13
86	Anon ID: 18	3,588	3.2	2,250	9	2,250	0.8	1,338	62.7%	£3,201	£819	3.91
87	Anon ID: 19	3,588	3.5	2,358	10	2,358	0.9	1,230	65.7%	£3,556	£858	4.14

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	8.4	5,335	24	5,335	2.0	- 1,747	148.7%	£8,535	£1,942	4.40
89	Shankill Road Library	25,844	36.1	20,903	103	20,903	7.8	4,941	80.9%	£36,631	£3,951	9.27
90	Fall Road Library	22,973	51.1	32,590	146	32,590	12.1	- 9,617	141.9%	£51,924	£6,160	8.43
91	Ormeau Road Library	23,942	32.2	31,672	92	31,672	11.7	- 7,730	132.3%	£32,719	£5,986	5.47
92	Belfast Central Library	175,478	46.9	36,071	134	36,071	13.4	139,407	20.6%	£47,656	£6,817	6.99
93	Woodstock Library	13,670	3.5	3,570	10	3,570	1.3	10,100	26.1%	£3,556	£675	5.27
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	262,004	865	262,004	97.2	138,414	65.4%	£307,632	£49,519	6.21
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	333,925	1,131	333,925	123.9	165,530	66.9%	£402,233	£63,112	6.37
Totals / Averages		21,598,484	8,459.9	6,985,537	24,171	6,985,537	2,590.9	14,612,947	32.3%	£8,596,265	£1,332,821	6.45

Scenario 1 (CBDM Results): 100% self-consumption and installation of PV on 100% of usable roof space

Table 2: (CBDM) Scenario 1: 100% self-consumption and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	33,727	168	33,727	12.5	665,954	4.8%	£59,748	£6,374	9.37
2	The Plaza	257,526	156.5	96,435	447	96,435	35.8	161,091	37.4%	£158,973	£18,226	8.72
5	Causeway Exchange	431,155	76.7	39,868	219	39,868	14.8	391,287	9.2%	£77,886	£7,535	10.34
7	Adelaide House	576,450	91.4	59,710	261	59,710	22.1	516,740	10.4%	£92,823	£11,285	8.23
13	Belfast City Council	925,435	299.6	162,002	856	162,002	60.1	763,433	17.5%	£304,431	£30,618	9.94
14	Ulster Hall	248,217	165.9	106,406	474	106,406	39.5	141,811	42.9%	£168,575	£20,111	8.38
15	Cecil Ward	466,475	19.3	6,355	55	6,355	2.4	460,120	1.4%	£19,560	£1,201	16.29
16	St Georges Market	218,861	270.2	167,568	772	167,568	62.2	51,293	76.6%	£274,557	£31,670	8.67
17	Shankill Leisure Centre	401,128	212.8	142,322	608	142,322	52.8	258,806	35.5%	£216,231	£26,899	8.04
18	Grove Wellbeing Centre	783,600	743.8	499,248	2,125	499,248	185.2	284,352	63.7%	£755,743	£94,358	8.01
19	Duncrue Complex	958,477	566.0	396,188	1,617	396,188	146.9	562,289	41.3%	£575,076	£74,880	7.68
20	Ozone Leisure Centre	194,093	615.3	421,834	1,758	421,834	156.5	- 227,741	217.3%	£625,222	£79,727	7.84
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	131,673	554	131,673	48.8	34,640	79.2%	£197,027	£24,886	7.92

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	37,505	165	37,505	13.9	291,426	11.4%	£58,681	£7,088	8.28
23	Morton Community Centre	54,447	98.7	65,963	282	65,963	24.5	-11,516	121.2%	£100,292	£12,467	8.04
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	93,385	34.6	17,976	83.9%	£136,567	£17,650	7.74
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	338,329	125.5	44,499	88.4%	£490,077	£63,944	7.66
28	Public Records Office of Northern Ireland	963,163	207.6	135,109	593	135,109	50.1	828,054	14.0%	£210,897	£25,536	8.26
35	106-108 Holywood Road	149,447	33.6	22,882	96	22,882	8.5	126,565	15.3%	£34,142	£4,325	7.89
43	Royal Victoria Hospital - New Maternity	989,645	169.1	104,731	483	104,731	38.8	884,914	10.6%	£171,776	£19,794	8.68
44	Royal Victoria Hospital - Kelvin	366,106	401.1	247,949	1,146	247,949	92.0	118,157	67.7%	£407,568	£46,862	8.70
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	138,460	598	138,460	51.4	4,271,058	3.1%	£212,675	£26,169	8.13
48	Belfast City Hospital - Multi	- no data	454.0	297,534	1,297	297,534	110.4	- 297,534	- no data	£461,270	£56,234	8.20

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	- no data	483.4	328,617	1,381	328,617	121.9	- 328,617	- no data	£491,144	£62,109	7.91
51	Mater Hospital - McAuley	1,133,827	292.6	203,489	836	203,489	75.5	930,338	17.9%	£297,318	£38,459	7.73
52	Mater Hospital - Dempsey	2,426,201	12.6	8,090	36	8,090	3.0	2,418,111	0.3%	£12,803	£1,529	8.37
53	Mater Hospital - Dorrian	522,942	67.2	40,375	192	40,375	15.0	482,567	7.7%	£68,284	£7,631	8.95
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	419,747	1,848	419,747	155.7	747,527	36.0%	£657,230	£79,332	8.28
58	Ulster Museum	1,031,844	263.2	169,530	752	169,530	62.9	862,314	16.4%	£267,444	£32,041	8.35
69	Anon ID: 1	3,588	4.2	2,604	12	2,604	1.0	984	72.6%	£4,268	£948	4.50
70	Anon ID: 2	3,588	4.9	3,170	14	3,170	1.2	418	88.4%	£4,979	£1,154	4.32
71	Anon ID: 3	3,588	5.6	3,433	16	3,433	1.3	155	95.7%	£5,690	£1,250	4.55
72	Anon ID: 4	3,588	7.7	3,700	22	3,700	1.4	- 112	103.1%	£7,824	£1,347	5.81
73	Anon ID: 5	3,588	4.2	2,710	12	2,710	1.0	878	75.5%	£4,268	£986	4.33
74	Anon ID: 6	3,588	4.9	3,039	14	3,039	1.1	549	84.7%	£4,979	£1,106	4.50
75	Anon ID: 7	3,588	5.6	3,430	16	3,430	1.3	158	95.6%	£5,690	£1,248	4.56

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	5.6	3,415	16	3,415	1.3	173	95.2%	£5,690	£1,243	4.58
77	Anon ID: 9	3,588	4.2	2,530	12	2,530	0.9	1,058	70.5%	£4,268	£921	4.63
78	Anon ID: 10	3,588	5.6	3,391	16	3,391	1.3	197	94.5%	£5,690	£1,234	4.61
79	Anon ID: 11	3,588	5.6	3,382	16	3,382	1.3	206	94.3%	£5,690	£1,231	4.62
80	Anon ID: 12	3,588	5.6	3,384	16	3,384	1.3	204	94.3%	£5,690	£1,232	4.62
81	Anon ID: 13	3,588	5.6	3,390	16	3,390	1.3	198	94.5%	£5,690	£1,234	4.61
82	Anon ID: 14	3,588	5.6	3,402	16	3,402	1.3	186	94.8%	£5,690	£1,238	4.60
83	Anon ID: 15	3,588	5.6	3,436	16	3,436	1.3	152	95.8%	£5,690	£1,251	4.55
84	Anon ID: 16	3,588	5.6	3,559	16	3,559	1.3	29	99.2%	£5,690	£1,295	4.39
85	Anon ID: 17	3,588	7.0	4,223	20	4,223	1.6	- 635	117.7%	£7,113	£1,537	4.63
86	Anon ID: 18	3,588	3.2	1,905	9	1,905	0.7	1,683	53.1%	£3,201	£693	4.62
87	Anon ID: 19	3,588	3.5	2,160	10	2,160	0.8	1,428	60.2%	£3,556	£786	4.52
88	Anon ID: 20	3,588	8.4	5,088	24	5,088	1.9	-1,500	141.8%	£8,535	£1,852	4.61
89	Shankill Road Library	25,844	36.1	20,110	103	20,110	7.5	5,734	77.8%	£36,631	£3,801	9.64
90	Fall Road Library	22,973	51.1	29,192	146	29,192	10.8	- 6,219	127.1%	£51,924	£5,517	9.41
91	Ormeau Road Library	23,942	32.2	22,504	92	22,504	8.3	1,438	94.0%	£32,719	£4,253	7.69

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92	Belfast Central Library	175,478	46.9	30,895	134	30,895	11.5	144,583	17.6%	£47,656	£5,839	8.16
93	Woodstock Library	13,670	3.5	2,431	10	2,431	0.9	11,239	17.8%	£3,556	£459	7.74
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	207,403	865	207,403	76.9	193,015	51.8%	£307,632	£39,199	7.85
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	268,755	1,131	268,755	99.7	230,700	53.8%	£402,233	£50,795	7.92
Totals / Averages		21,598,484	8,459.9	5,561,672	24,171	5,561,672	2,062.8	16,036,812	25.8%	£8,596,265	£1,062,591	8.09

Scenario 2 (SAP Results): 75% self-consumption, 25% export and installation of PV on 100% of usable roof space .

Table 3: (SAP) Scenario 2: 75% self-consumption, 25% export and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	38,850	168	29,138	10.8	670,544	4.2%	£59,748	£5,988	9.98
2	The Plaza	257,526	156.5	111,995	447	83,996	31.2	173,530	32.6%	£158,973	£17,261	9.21
5	Causeway Exchange	431,155	76.7	37,832	219	28,374	10.5	402,781	6.6%	£77,886	£5,831	13.36
7	Adelaide House	576,450	91.4	70,181	261	52,636	19.5	523,814	9.1%	£92,823	£10,817	8.58
13	Belfast City Council	925,435	299.6	151,062	856	113,297	42.0	812,139	12.2%	£304,431	£23,282	13.08
14	Ulster Hall	248,217	165.9	115,056	474	86,292	32.0	161,925	34.8%	£168,575	£17,733	9.51
15	Cecil Ward	466,475	19.3	6,914	55	5,186	1.9	461,290	1.1%	£19,560	£1,066	18.36
16	St Georges Market	218,861	270.2	181,376	772	136,032	50.5	82,829	62.2%	£274,557	£27,955	9.82
17	Shankill Leisure Centre	401,128	212.8	179,429	608	134,572	49.9	266,556	33.5%	£216,231	£27,654	7.82
18	Grove Wellbeing Centre	783,600	743.8	682,559	2,125	511,919	189.9	271,681	65.3%	£755,743	£105,199	7.18
19	Duncrue Complex	958,477	566.0	529,345	1,617	397,009	147.3	561,468	41.4%	£575,076	£81,585	7.05
20	Ozone Leisure Centre	194,093	615.3	552,133	1,758	414,100	153.6	- 220,007	213.4%	£625,222	£85,097	7.35
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	174,522	554	130,892	48.5	35,422	78.7%	£197,027	£26,898	7.32

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	41,478	165	31,109	11.5	297,823	9.5%	£58,681	£6,393	9.18
23	Morton Community Centre	54,447	98.7	83,816	282	62,862	23.3	-8,415	115.5%	£100,292	£12,918	7.76
25	Department for Communities Offices, James House	111,361	134.4	126,134	384	94,601	35.1	16,761	84.9%	£136,567	£19,440	7.02
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	367,926	136.5	14,902	96.1%	£490,077	£75,609	6.48
28	Public Records Office of Northern Ireland	963,163	207.6	185,068	593	138,801	51.5	824,362	14.4%	£210,897	£28,524	7.39
35	106-108 Holywood Road	149,447	33.6	26,279	96	19,709	7.3	129,738	13.2%	£34,142	£4,050	8.43
43	Royal Victoria Hospital - New Maternity	989,645	169.1	124,810	483	93,608	34.7	896,038	9.5%	£171,776	£19,236	8.93
44	Royal Victoria Hospital - Kelvin	366,106	401.1	297,328	1,146	222,996	82.7	143,110	60.9%	£407,568	£45,826	8.89

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	181,033	598	135,775	50.4	4,273,743	3.1%	£212,675	£27,902	7.62
48	Belfast City Hospital - Multi Storey Car Park 2	-	454.0	320,010	1,297	240,008	89.0	- 240,008	No data	£461,270	£49,322	9.35
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	420,344	1,381	315,258	116.9	- 315,258	No data	£491,144	£64,786	7.58
51	Mater Hospital - McAuley	1,133,827	292.6	266,714	836	200,036	74.2	933,792	17.6%	£297,318	£41,107	7.23
52	Mater Hospital - Dempsey	2,426,201	12.6	9,761	36	7,321	2.7	2,418,880	0.3%	£12,803	£1,504	8.51
53	Mater Hospital - Dorrian	522,942	67.2	40,855	192	30,641	11.4	492,301	5.9%	£68,284	£6,297	10.84
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	530,276	1,848	397,707	147.5	769,567	34.1%	£657,230	£81,729	8.04
58	Ulster Museum	1,031,844	263.2	217,327	752	162,995	60.5	868,848	15.8%	£267,444	£33,496	7.98
69	Anon ID: 1	3,588	4.2	2,712	12	2,034	0.8	1,554	56.7%	£4,268	£774	5.51
70	Anon ID: 2	3,588	4.9	3,356	14	2,517	0.9	1,071	70.2%	£4,979	£958	5.20
71	Anon ID: 3	3,588	5.6	4,200	16	3,150	1.2	438	87.8%	£5,690	£1,199	4.75

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	7.7	3,206	22	2,405	0.9	1,184	67.0%	£7,824	£915	8.55
73	Anon ID: 5	3,588	4.2	2,904	12	2,178	0.8	1,410	60.7%	£4,268	£829	5.15
74	Anon ID: 6	3,588	4.9	3,178	14	2,384	0.9	1,205	66.4%	£4,979	£907	5.49
75	Anon ID: 7	3,588	5.6	4,272	16	3,204	1.2	384	89.3%	£5,690	£1,219	4.67
76	Anon ID: 8	3,588	5.6	4,280	16	3,210	1.2	378	89.5%	£5,690	£1,221	4.66
77	Anon ID: 9	3,588	4.2	3,168	12	2,376	0.9	1,212	66.2%	£4,268	£904	4.72
78	Anon ID: 10	3,588	5.6	3,608	16	2,706	1.0	882	75.4%	£5,690	£1,030	5.53
79	Anon ID: 11	3,588	5.6	3,608	16	2,706	1.0	882	75.4%	£5,690	£1,030	5.53
80	Anon ID: 12	3,588	5.6	3,608	16	2,706	1.0	882	75.4%	£5,690	£1,030	5.53
81	Anon ID: 13	3,588	5.6	3,608	16	2,706	1.0	882	75.4%	£5,690	£1,030	5.53
82	Anon ID: 14	3,588	5.6	3,608	16	2,706	1.0	882	75.4%	£5,690	£1,030	5.53
83	Anon ID: 15	3,588	5.6	3,624	16	2,718	1.0	870	75.8%	£5,690	£1,034	5.50
84	Anon ID: 16	3,588	5.6	4,128	16	3,096	1.1	492	86.3%	£5,690	£1,178	4.83
85	Anon ID: 17	3,588	7.0	4,736	20	3,552	1.3	36	99.0%	£7,113	£1,351	5.26
86	Anon ID: 18	3,588	3.2	2,250	9	1,688	0.6	1,901	47.0%	£3,201	£642	4.99
87	Anon ID: 19	3,588	3.5	2,358	10	1,769	0.7	1,820	49.3%	£3,556	£673	5.29

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	8.4	5,335	24	4,001	1.5	-413	111.5%	£8,535	£1,522	5.61
89	Shankill Road Library	25,844	36.1	20,903	103	15,677	5.8	10,167	60.7%	£36,631	£3,222	11.37
90	Fall Road Library	22,973	51.1	32,590	146	24,443	9.1	-1,470	106.4%	£51,924	£5,023	10.34
91	Ormeau Road Library	23,942	32.2	31,672	92	23,754	8.8	188	99.2%	£32,719	£4,881	6.70
92	Belfast Central Library	175,478	46.9	36,071	134	27,053	10.0	148,425	15.4%	£47,656	£5,559	8.57
93	Woodstock Library	13,670	3.5	3,570	10	2,678	1.0	10,992	19.6%	£3,556	£550	6.46
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	262,004	865	196,503	72.9	203,915	49.1%	£307,632	£40,381	7.62
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	333,925	1,131	250,444	92.9	249,011	50.1%	£402,233	£51,466	7.82
Totals / Averages		21,598,484	8,459.9	6,985,537	24,171	5,239,153	1,943.2	16,359,331	24.3%	£8,596,265	£1,086,062	7.92

Scenario 2 (CBDM Results): 75% self-consumption, 25% export and installation of PV on 100% of usable roof space .

Table 4: (CBDM) Scenario 2: 75% self-consumption, 25% export and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	33,727	168	25,295	9.4	674,386	3.6%	£59,748	£5,198	11.49
2	The Plaza	257,526	156.5	96,435	447	72,326	26.8	185,200	28.1%	£158,973	£14,863	10.70
5	Causeway Exchange	431,155	76.7	39,868	219	29,901	11.1	401,254	6.9%	£77,886	£6,145	12.68
7	Adelaide House	576,450	91.4	59,710	261	44,783	16.6	531,668	7.8%	£92,823	£9,203	10.09
13	Belfast City Council	925,435	299.6	162,002	856	121,502	45.1	803,934	13.1%	£304,431	£24,969	12.19
14	Ulster Hall	248,217	165.9	106,406	474	79,805	29.6	168,413	32.2%	£168,575	£16,400	10.28
15	Cecil Ward	466,475	19.3	6,355	55	4,766	1.8	461,709	1.0%	£19,560	£979	19.97
16	St Georges Market	218,861	270.2	167,568	772	125,676	46.6	93,185	57.4%	£274,557	£25,826	10.63
17	Shankill Leisure Centre	401,128	212.8	142,322	608	106,742	39.6	294,387	26.6%	£216,231	£21,935	9.86
18	Grove Wellbeing Centre	783,600	743.8	499,248	2,125	374,436	138.9	409,164	47.8%	£755,743	£76,947	9.82
19	Duncrue Complex	958,477	566.0	396,188	1,617	297,141	110.2	661,336	31.0%	£575,076	£61,062	9.42
20	Ozone Leisure Centre	194,093	615.3	421,834	1,758	316,376	117.3	- 122,283	163.0%	£625,222	£65,015	9.62
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	131,673	554	98,755	36.6	67,558	59.4%	£197,027	£20,294	9.71

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	37,505	165	28,129	10.4	300,802	8.6%	£58,681	£5,780	10.15
23	Morton Community Centre	54,447	98.7	65,963	282	49,472	18.3	4,975	90.9%	£100,292	£10,167	9.86
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	70,039	26.0	41,322	62.9%	£136,567	£14,393	9.49
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	253,747	94.1	129,082	66.3%	£490,077	£52,145	9.40
28	Public Records Office of Northern Ireland	963,163	207.6	135,109	593	101,332	37.6	861,832	10.5%	£210,897	£20,824	10.13
35	106-108 Holywood Road	149,447	33.6	22,882	96	17,162	6.4	132,286	11.5%	£34,142	£3,527	9.68
43	Royal Victoria Hospital - New Maternity	989,645	169.1	104,731	483	78,548	29.1	911,097	7.9%	£171,776	£16,142	10.64
44	Royal Victoria Hospital - Kelvin	366,106	401.1	247,949	1,146	185,962	69.0	180,144	50.8%	£407,568	£38,215	10.67
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	138,460	598	103,845	38.5	4,305,673	2.4%	£212,675	£21,340	9.97
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	223,151	82.8	- 223,151	No data	£461,270	£45,857	10.06

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	246,463	91.4	- 246,463	No data	£491,144	£50,648	9.70
51	Mater Hospital - McAuley	1,133,827	292.6	203,489	836	152,617	56.6	981,210	13.5%	£297,318	£31,363	9.48
52	Mater Hospital - Dempsey	2,426,201	12.6	8,090	36	6,068	2.3	2,420,134	0.3%	£12,803	£1,247	10.27
53	Mater Hospital - Dorrian	522,942	67.2	40,375	192	30,281	11.2	492,661	5.8%	£68,284	£6,223	10.97
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	419,747	1,848	314,810	116.8	852,464	27.0%	£657,230	£64,694	10.16
58	Ulster Museum	1,031,844	263.2	169,530	752	127,148	47.2	904,696	12.3%	£267,444	£26,129	10.24
69	Anon ID: 1	3,588	4.2	2,604	12	1,953	0.7	1,635	54.4%	£4,268	£743	5.74
70	Anon ID: 2	3,588	4.9	3,170	14	2,378	0.9	1,211	66.3%	£4,979	£905	5.50
71	Anon ID: 3	3,588	5.6	3,433	16	2,575	1.0	1,013	71.8%	£5,690	£980	5.81
72	Anon ID: 4	3,588	7.7	3,700	22	2,775	1.0	813	77.3%	£7,824	£1,056	7.41
73	Anon ID: 5	3,588	4.2	2,710	12	2,033	0.8	1,556	56.6%	£4,268	£773	5.52
74	Anon ID: 6	3,588	4.9	3,039	14	2,279	0.8	1,309	63.5%	£4,979	£867	5.74
75	Anon ID: 7	3,588	5.6	3,430	16	2,573	1.0	1,016	71.7%	£5,690	£979	5.81

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	5.6	3,415	16	2,561	0.9	1,027	71.4%	£5,690	£975	5.84
77	Anon ID: 9	3,588	4.2	2,530	12	1,898	0.7	1,691	52.9%	£4,268	£722	5.91
78	Anon ID: 10	3,588	5.6	3,391	16	2,543	0.9	1,045	70.9%	£5,690	£968	5.88
79	Anon ID: 11	3,588	5.6	3,382	16	2,537	0.9	1,052	70.7%	£5,690	£965	5.90
80	Anon ID: 12	3,588	5.6	3,384	16	2,538	0.9	1,050	70.7%	£5,690	£966	5.89
81	Anon ID: 13	3,588	5.6	3,390	16	2,543	0.9	1,046	70.9%	£5,690	£967	5.88
82	Anon ID: 14	3,588	5.6	3,402	16	2,552	0.9	1,037	71.1%	£5,690	£971	5.86
83	Anon ID: 15	3,588	5.6	3,436	16	2,577	1.0	1,011	71.8%	£5,690	£980	5.80
84	Anon ID: 16	3,588	5.6	3,559	16	2,669	1.0	919	74.4%	£5,690	£1,016	5.60
85	Anon ID: 17	3,588	7.0	4,223	20	3,167	1.2	421	88.3%	£7,113	£1,205	5.90
86	Anon ID: 18	3,588	3.2	1,905	9	1,429	0.5	2,159	39.8%	£3,201	£544	5.89
87	Anon ID: 19	3,588	3.5	2,160	10	1,620	0.6	1,968	45.2%	£3,556	£616	5.77
88	Anon ID: 20	3,588	8.4	5,088	24	3,816	1.4	- 228	106.4%	£8,535	£1,452	5.88
89	Shankill Road Library	25,844	36.1	20,110	103	15,083	5.6	10,761	58.4%	£36,631	£3,099	11.82
90	Fall Road Library	22,973	51.1	29,192	146	21,894	8.1	1,079	95.3%	£51,924	£4,499	11.54
91	Ormeau Road Library	23,942	32.2	22,504	92	16,878	6.3	7,064	70.5%	£32,719	£3,468	9.43

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	46.9	30,895	134	23,171	8.6	152,307	13.2%	£47,656	£4,762	10.01
93	Woodstock Library	13,670	3.5	2,431	10	1,823	0.7	11,847	13.3%	£3,556	£375	9.49
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	207,403	865	155,552	57.7	244,865	38.8%	£307,632	£31,966	9.62
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	268,755	1,131	201,566	74.8	297,889	40.4%	£402,233	£41,422	9.71
Totals / Averages		21,598,484	8,459.9	5,561,672	24,171	4,171,254	1,547.1	17,427,230	19.3%	£8,596,265	£865,769	9.93

Scenario 3 (SAP Results): 50% self-consumption, 50% export and installation of PV on 100% of usable roof space .

Table 5: (SAP) Scenario 3. 50% self-consumption, 50% export and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	38,850	168	19,425	7.2	680,256	2.8%	£59,748	£4,633	12.90
2	The Plaza	257,526	156.5	111,995	447	55,998	20.8	201,529	21.7%	£158,973	£13,355	11.90
5	Causeway Exchange	431,155	76.7	37,832	219	18,916	7.0	412,239	4.4%	£77,886	£4,511	17.26
7	Adelaide House	576,450	91.4	70,181	261	35,091	13.0	541,360	6.1%	£92,823	£8,369	11.09
13	Belfast City Council	925,435	299.6	151,062	856	75,531	28.0	849,904	8.2%	£304,431	£18,014	16.90
14	Ulster Hall	248,217	165.9	115,056	474	57,528	21.3	190,689	23.2%	£168,575	£13,720	12.29
15	Cecil Ward	466,475	19.3	6,914	55	3,457	1.3	463,018	0.7%	£19,560	£824	23.72
16	St Georges Market	218,861	270.2	181,376	772	90,688	33.6	128,173	41.4%	£274,557	£21,629	12.69
17	Shankill Leisure Centre	401,128	212.8	179,429	608	89,715	33.3	311,414	22.4%	£216,231	£21,397	10.11
18	Grove Wellbeing Centre	783,600	743.8	682,559	2,125	341,280	126.6	442,321	43.6%	£755,743	£81,395	9.28
19	Duncrue Complex	958,477	566.0	529,345	1,617	264,673	98.2	693,805	27.6%	£575,076	£63,124	9.11
20	Ozone Leisure Centre	194,093	615.3	552,133	1,758	276,067	102.4	- 81,974	142.2%	£625,222	£65,842	9.50
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	174,522	554	87,261	32.4	79,052	52.5%	£197,027	£20,812	9.47

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	41,478	165	20,739	7.7	308,192	6.3%	£58,681	£4,946	11.86
23	Morton Community Centre	54,447	98.7	83,816	282	41,908	15.5	12,539	77.0%	£100,292	£9,995	10.03
25	Department for Communities Offices, James House	111,361	134.4	126,134	384	63,067	23.4	48,294	56.6%	£136,567	£15,041	9.08
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	245,284	91.0	137,544	64.1%	£490,077	£58,500	8.38
28	Public Records Office of Northern Ireland	963,163	207.6	185,068	593	92,534	34.3	870,629	9.6%	£210,897	£22,069	9.56
35	106-108 Holywood Road	149,447	33.6	26,279	96	13,140	4.9	136,308	8.8%	£34,142	£3,134	10.89
43	Royal Victoria Hospital - New Maternity	989,645	169.1	124,810	483	62,405	23.1	927,240	6.3%	£171,776	£14,884	11.54
44	Royal Victoria Hospital - Kelvin	366,106	401.1	297,328	1,146	148,664	55.1	217,442	40.6%	£407,568	£35,456	11.49

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	181,033	598	90,517	33.6	4,319,002	2.1%	£212,675	£21,588	9.85
48	Belfast City Hospital - Multi Storey Car Park 2	-	454.0	320,010	1,297	160,005	59.3	-160,005	No data	£461,270	£38,161	12.09
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	420,344	1,381	210,172	78.0	-210,172	No data	£491,144	£50,126	9.80
51	Mater Hospital - McAuley	1,133,827	292.6	266,714	836	133,357	49.5	1,000,470	11.8%	£297,318	£31,806	9.35
52	Mater Hospital - Dempsey	2,426,201	12.6	9,761	36	4,881	1.8	2,421,321	0.2%	£12,803	£1,164	11.00
53	Mater Hospital - Dorrian	522,942	67.2	40,855	192	20,428	7.6	502,515	3.9%	£68,284	£4,872	14.02
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	530,276	1,848	265,138	98.3	902,136	22.7%	£657,230	£63,235	10.39
58	Ulster Museum	1,031,844	263.2	217,327	752	108,664	40.3	923,180	10.5%	£267,444	£25,916	10.32
69	Anon ID: 1	3,588	4.2	2,712	12	1,356	0.5	2,232	37.8%	£4,268	£561	7.61
70	Anon ID: 2	3,588	4.9	3,356	14	1,678	0.6	1,910	46.8%	£4,979	£694	7.18
71	Anon ID: 3	3,588	5.6	4,200	16	2,100	0.8	1,488	58.5%	£5,690	£868	6.55

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	7.7	3,206	22	1,603	0.6	1,985	44.7%	£7,824	£663	11.80
73	Anon ID: 5	3,588	4.2	2,904	12	1,452	0.5	2,136	40.5%	£4,268	£600	7.11
74	Anon ID: 6	3,588	4.9	3,178	14	1,589	0.6	1,999	44.3%	£4,979	£657	7.58
75	Anon ID: 7	3,588	5.6	4,272	16	2,136	0.8	1,452	59.5%	£5,690	£883	6.44
76	Anon ID: 8	3,588	5.6	4,280	16	2,140	0.8	1,448	59.6%	£5,690	£885	6.43
77	Anon ID: 9	3,588	4.2	3,168	12	1,584	0.6	2,004	44.1%	£4,268	£655	6.52
78	Anon ID: 10	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£746	7.63
79	Anon ID: 11	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£746	7.63
80	Anon ID: 12	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£746	7.63
81	Anon ID: 13	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£746	7.63
82	Anon ID: 14	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£746	7.63
83	Anon ID: 15	3,588	5.6	3,624	16	1,812	0.7	1,776	50.5%	£5,690	£749	7.59
84	Anon ID: 16	3,588	5.6	4,128	16	2,064	0.8	1,524	57.5%	£5,690	£853	6.67
85	Anon ID: 17	3,588	7.0	4,736	20	2,368	0.9	1,220	66.0%	£7,113	£979	7.26
86	Anon ID: 18	3,588	3.2	2,250	9	1,125	0.4	2,463	31.4%	£3,201	£465	6.88
87	Anon ID: 19	3,588	3.5	2,358	10	1,179	0.4	2,409	32.9%	£3,556	£487	7.30

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	8.4	5,335	24	2,668	1.0	921	74.3%	£8,535	£1,103	7.74
89	Shankill Road Library	25,844	36.1	20,903	103	10,452	3.9	15,392	40.4%	£36,631	£2,493	14.70
90	Fall Road Library	22,973	51.1	32,590	146	16,295	6.0	6,678	70.9%	£51,924	£3,886	13.36
91	Ormeau Road Library	23,942	32.2	31,672	92	15,836	5.9	8,106	66.1%	£32,719	£3,777	8.66
92	Belfast Central Library	175,478	46.9	36,071	134	18,036	6.7	157,442	10.3%	£47,656	£4,301	11.08
93	Woodstock Library	13,670	3.5	3,570	10	1,785	0.7	11,885	13.1%	£3,556	£426	8.35
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	262,004	865	131,002	48.6	269,416	32.7%	£307,632	£31,244	9.85
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	333,925	1,131	166,963	61.9	332,492	33.4%	£402,233	£39,821	10.10
Totals / Averages		21,598,484	8,459.9	6,985,537	24,171	3,492,769	1,295.5	18,105,715	16.2%	£8,596,265	£839,302	10.24

Scenario 3 (CBDM Results): 50% self-consumption, 50% export and installation of PV on 100% of usable roof space .

Table 6: (CBDM) Scenario 3: 50% self-consumption, 50% export and installation of PV on 100% of usable roof space .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	33,727	168	16,864	6.3	682,818	2.4%	£59,748	£4,022	14.86
2	The Plaza	257,526	156.5	96,435	447	48,218	17.9	209,309	18.7%	£158,973	£11,500	13.82
5	Causeway Exchange	431,155	76.7	39,868	219	19,934	7.4	411,221	4.6%	£77,886	£4,754	16.38
7	Adelaide House	576,450	91.4	59,710	261	29,855	11.1	546,595	5.2%	£92,823	£7,120	13.04
13	Belfast City Council	925,435	299.6	162,002	856	81,001	30.0	844,434	8.8%	£304,431	£19,319	15.76
14	Ulster Hall	248,217	165.9	106,406	474	53,203	19.7	195,014	21.4%	£168,575	£12,689	13.29
15	Cecil Ward	466,475	19.3	6,355	55	3,178	1.2	463,298	0.7%	£19,560	£758	25.81
16	St Georges Market	218,861	270.2	167,568	772	83,784	31.1	135,077	38.3%	£274,557	£19,982	13.74
17	Shankill Leisure Centre	401,128	212.8	142,322	608	71,161	26.4	329,967	17.7%	£216,231	£16,972	12.74
18	Grove Wellbeing Centre	783,600	743.8	499,248	2,125	249,624	92.6	533,976	31.9%	£755,743	£59,535	12.69
19	Duncrue Complex	958,477	566.0	396,188	1,617	198,094	73.5	760,383	20.7%	£575,076	£47,245	12.17
20	Ozone Leisure Centre	194,093	615.3	421,834	1,758	210,917	78.2	- 16,824	108.7%	£625,222	£50,304	12.43
21	GLL Connswater Gym, Unit 11 Connswater	166,313	193.9	131,673	554	65,837	24.4	100,477	39.6%	£197,027	£15,702	12.55

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	37,505	165	18,753	7.0	310,179	5.7%	£58,681	£4,472	13.12
23	Morton Community Centre	54,447	98.7	65,963	282	32,982	12.2	21,466	60.6%	£100,292	£7,866	12.75
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	46,693	17.3	64,669	41.9%	£136,567	£11,136	12.26
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	169,165	62.7	213,664	44.2%	£490,077	£40,346	12.15
28	Public Records Office of Northern Ireland	963,163	207.6	135,109	593	67,555	25.1	895,609	7.0%	£210,897	£16,112	13.09
35	106-108 Holywood Road	149,447	33.6	22,882	96	11,441	4.2	138,006	7.7%	£34,142	£2,729	12.51
43	Royal Victoria Hospital - New Maternity	989,645	169.1	104,731	483	52,366	19.4	937,280	5.3%	£171,776	£12,489	13.75
44	Royal Victoria Hospital - Kelvin	366,106	401.1	247,949	1,146	123,975	46.0	242,132	33.9%	£407,568	£29,568	13.78
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	138,460	598	69,230	25.7	4,340,288	1.6%	£212,675	£16,511	12.88
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	148,767	55.2	-148,767	No data	£461,270	£35,481	13.00

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	164,309	60.9	- 164,309	No data	£491,144	£39,188	12.53
51	Mater Hospital - McAuley	1,133,827	292.6	203,489	836	101,745	37.7	1,032,083	9.0%	£297,318	£24,266	12.25
52	Mater Hospital - Dempsey	2,426,201	12.6	8,090	36	4,045	1.5	2,422,156	0.2%	£12,803	£965	13.27
53	Mater Hospital - Dorrian	522,942	67.2	40,375	192	20,188	7.5	502,755	3.9%	£68,284	£4,815	14.18
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	419,747	1,848	209,874	77.8	957,401	18.0%	£657,230	£50,055	13.13
58	Ulster Museum	1,031,844	263.2	169,530	752	84,765	31.4	947,079	8.2%	£267,444	£20,216	13.23
69	Anon ID: 1	3,588	4.2	2,604	12	1,302	0.5	2,286	36.3%	£4,268	£538	7.93
70	Anon ID: 2	3,588	4.9	3,170	14	1,585	0.6	2,003	44.2%	£4,979	£655	7.60
71	Anon ID: 3	3,588	5.6	3,433	16	1,717	0.6	1,872	47.8%	£5,690	£710	8.02
72	Anon ID: 4	3,588	7.7	3,700	22	1,850	0.7	1,738	51.6%	£7,824	£765	10.23
73	Anon ID: 5	3,588	4.2	2,710	12	1,355	0.5	2,233	37.8%	£4,268	£560	7.62
74	Anon ID: 6	3,588	4.9	3,039	14	1,520	0.6	2,069	42.3%	£4,979	£628	7.92
75	Anon ID: 7	3,588	5.6	3,430	16	1,715	0.6	1,873	47.8%	£5,690	£709	8.02

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	5.6	3,415	16	1,708	0.6	1,881	47.6%	£5,690	£706	8.06
77	Anon ID: 9	3,588	4.2	2,530	12	1,265	0.5	2,323	35.3%	£4,268	£523	8.16
78	Anon ID: 10	3,588	5.6	3,391	16	1,696	0.6	1,893	47.3%	£5,690	£701	8.12
79	Anon ID: 11	3,588	5.6	3,382	16	1,691	0.6	1,897	47.1%	£5,690	£699	8.14
80	Anon ID: 12	3,588	5.6	3,384	16	1,692	0.6	1,896	47.2%	£5,690	£700	8.13
81	Anon ID: 13	3,588	5.6	3,390	16	1,695	0.6	1,893	47.2%	£5,690	£701	8.12
82	Anon ID: 14	3,588	5.6	3,402	16	1,701	0.6	1,887	47.4%	£5,690	£703	8.09
83	Anon ID: 15	3,588	5.6	3,436	16	1,718	0.6	1,870	47.9%	£5,690	£710	8.01
84	Anon ID: 16	3,588	5.6	3,559	16	1,780	0.7	1,809	49.6%	£5,690	£736	7.73
85	Anon ID: 17	3,588	7.0	4,223	20	2,112	0.8	1,477	58.8%	£7,113	£873	8.15
86	Anon ID: 18	3,588	3.2	1,905	9	953	0.4	2,636	26.5%	£3,201	£394	8.13
87	Anon ID: 19	3,588	3.5	2,160	10	1,080	0.4	2,508	30.1%	£3,556	£447	7.96
88	Anon ID: 20	3,588	8.4	5,088	24	2,544	0.9	1,044	70.9%	£8,535	£1,052	8.11
89	Shankill Road Library	25,844	36.1	20,110	103	10,055	3.7	15,789	38.9%	£36,631	£2,398	15.28
90	Fall Road Library	22,973	51.1	29,192	146	14,596	5.4	8,377	63.5%	£51,924	£3,481	14.92
91	Ormeau Road Library	23,942	32.2	22,504	92	11,252	4.2	12,690	47.0%	£32,719	£2,684	12.19

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	46.9	30,895	134	15,448	5.7	160,030	8.8%	£47,656	£3,684	12.94
93	Woodstock Library	13,670	3.5	2,431	10	1,216	0.5	12,454	8.9%	£3,556	£290	12.27
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	207,403	865	103,702	38.5	296,716	25.9%	£307,632	£24,733	12.44
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	268,755	1,131	134,378	49.8	365,077	26.9%	£402,233	£32,049	12.55
Totals / Averages		21,598,484	8,459.9	5,561,672	24,171	2,780,836	1,031.4	18,817,648	12.9%	£8,596,265	£668,947	12.85

Scenario 4 (SAP Results): 50% self-consumption, 0% export and installation of PV on 100% of usable roof space . This scenario demonstrates the potential option for, and impact of, zero export agreements with the electricity Distribution Network Operator (DNO).

Table 7: (SAP) Scenario 4. 50% self-consumption, 0% export and installation of PV on 100% of usable roof space . This scenario demonstrates the potential option for, and impact of, zero export agreements with the electricity Distribution Network Operator (DNO).

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	38,850	168	19,425	7.2	680,256	2.8%	£59,748	£3,671	16.27
2	The Plaza	257,526	156.5	111,995	447	55,998	20.8	201,529	21.7%	£158,973	£10,584	15.02
5	Causeway Exchange	431,155	76.7	37,832	219	18,916	7.0	412,239	4.4%	£77,886	£3,575	21.79
7	Adelaide House	576,450	91.4	70,181	261	35,091	13.0	541,360	6.1%	£92,823	£6,632	14.00
13	Belfast City Council	925,435	299.6	151,062	856	75,531	28.0	849,904	8.2%	£304,431	£14,275	21.33
14	Ulster Hall	248,217	165.9	115,056	474	57,528	21.3	190,689	23.2%	£168,575	£10,873	15.50
15	Cecil Ward	466,475	19.3	6,914	55	3,457	1.3	463,018	0.7%	£19,560	£653	29.94
16	St Georges Market	218,861	270.2	181,376	772	90,688	33.6	128,173	41.4%	£274,557	£17,140	16.02
17	Shankill Leisure Centre	401,128	212.8	179,429	608	89,715	33.3	311,414	22.4%	£216,231	£16,956	12.75
18	Grove Wellbeing Centre	783,600	743.8	682,559	2,125	341,280	126.6	442,321	43.6%	£755,743	£64,502	11.72
19	Duncrue Complex	958,477	566.0	529,345	1,617	264,673	98.2	693,805	27.6%	£575,076	£50,023	11.50
20	Ozone Leisure Centre	194,093	615.3	552,133	1,758	276,067	102.4	-81,974	142.2%	£625,222	£52,177	11.98
21	GLL Connswater Gym, Unit 11	166,313	193.9	174,522	554	87,261	32.4	79,052	52.5%	£197,027	£16,492	11.95

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Connswater Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	41,478	165	20,739	7.7	308,192	6.3%	£58,681	£3,920	14.97
23	Morton Community Centre	54,447	98.7	83,816	282	41,908	15.5	12,539	77.0%	£100,292	£7,921	12.66
25	Department for Communities Offices, James House	111,361	134.4	126,134	384	63,067	23.4	48,294	56.6%	£136,567	£11,920	11.46
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	245,284	91.0	137,544	64.1%	£490,077	£46,359	10.57
28	Public Records Office of Northern Ireland	963,163	207.6	185,068	593	92,534	34.3	870,629	9.6%	£210,897	£17,489	12.06
35	106-108 Holywood Road	149,447	33.6	26,279	96	13,140	4.9	136,308	8.8%	£34,142	£2,483	13.75
43	Royal Victoria Hospital - New Maternity	989,645	169.1	124,810	483	62,405	23.1	927,240	6.3%	£171,776	£11,795	14.56
44	Royal Victoria Hospital - Kelvin	366,106	401.1	297,328	1,146	148,664	55.1	217,442	40.6%	£407,568	£28,097	14.51

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	181,033	598	90,517	33.6	4,319,002	2.1%	£212,675	£17,108	12.43
48	Belfast City Hospital - Multi Storey Car Park 2	-	454.0	320,010	1,297	160,005	59.3	- 160,005	No data	£461,270	£30,241	15.25
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	420,344	1,381	210,172	78.0	- 210,172	No data	£491,144	£39,723	12.36
51	Mater Hospital - McAuley	1,133,827	292.6	266,714	836	133,357	49.5	1,000,470	11.8%	£297,318	£25,204	11.80
52	Mater Hospital - Dempsey	2,426,201	12.6	9,761	36	4,881	1.8	2,421,321	0.2%	£12,803	£922	13.88
53	Mater Hospital - Dorrian	522,942	67.2	40,855	192	20,428	7.6	502,515	3.9%	£68,284	£3,861	17.69
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	530,276	1,848	265,138	98.3	902,136	22.7%	£657,230	£50,111	13.12
58	Ulster Museum	1,031,844	263.2	217,327	752	108,664	40.3	923,180	10.5%	£267,444	£20,537	13.02
69	Anon ID: 1	3,588	4.2	2,712	12	1,356	0.5	2,232	37.8%	£4,268	£494	8.65
70	Anon ID: 2	3,588	4.9	3,356	14	1,678	0.6	1,910	46.8%	£4,979	£611	8.15
71	Anon ID: 3	3,588	5.6	4,200	16	2,100	0.8	1,488	58.5%	£5,690	£764	7.44

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	7.7	3,206	22	1,603	0.6	1,985	44.7%	£7,824	£583	13.41
73	Anon ID: 5	3,588	4.2	2,904	12	1,452	0.5	2,136	40.5%	£4,268	£528	8.08
74	Anon ID: 6	3,588	4.9	3,178	14	1,589	0.6	1,999	44.3%	£4,979	£578	8.61
75	Anon ID: 7	3,588	5.6	4,272	16	2,136	0.8	1,452	59.5%	£5,690	£777	7.32
76	Anon ID: 8	3,588	5.6	4,280	16	2,140	0.8	1,448	59.6%	£5,690	£779	7.31
77	Anon ID: 9	3,588	4.2	3,168	12	1,584	0.6	2,004	44.1%	£4,268	£577	7.40
78	Anon ID: 10	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£657	8.67
79	Anon ID: 11	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£657	8.67
80	Anon ID: 12	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£657	8.67
81	Anon ID: 13	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£657	8.67
82	Anon ID: 14	3,588	5.6	3,608	16	1,804	0.7	1,784	50.3%	£5,690	£657	8.67
83	Anon ID: 15	3,588	5.6	3,624	16	1,812	0.7	1,776	50.5%	£5,690	£660	8.63
84	Anon ID: 16	3,588	5.6	4,128	16	2,064	0.8	1,524	57.5%	£5,690	£751	7.57
85	Anon ID: 17	3,588	7.0	4,736	20	2,368	0.9	1,220	66.0%	£7,113	£862	8.25
86	Anon ID: 18	3,588	3.2	2,250	9	1,125	0.4	2,463	31.4%	£3,201	£409	7.82
87	Anon ID: 19	3,588	3.5	2,358	10	1,179	0.4	2,409	32.9%	£3,556	£429	8.29

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	8.4	5,335	24	2,668	1.0	921	74.3%	£8,535	£971	8.79
89	Shankill Road Library	25,844	36.1	20,903	103	10,452	3.9	15,392	40.4%	£36,631	£1,975	18.54
90	Fall Road Library	22,973	51.1	32,590	146	16,295	6.0	6,678	70.9%	£51,924	£3,080	16.86
91	Ormeau Road Library	23,942	32.2	31,672	92	15,836	5.9	8,106	66.1%	£32,719	£2,993	10.93
92	Belfast Central Library	175,478	46.9	36,071	134	18,036	6.7	157,442	10.3%	£47,656	£3,409	13.98
93	Woodstock Library	13,670	3.5	3,570	10	1,785	0.7	11,885	13.1%	£3,556	£337	10.54
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	262,004	865	131,002	48.6	269,416	32.7%	£307,632	£24,759	12.42
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	333,925	1,131	166,963	61.9	332,492	33.4%	£402,233	£31,556	12.75
Totals / Averages		21,598,484	8,459.9	6,985,537	24,171	3,492,769	1,295.5	18,105,715	16.2%	£8,596,265	£666,410	12.90

Scenario 4 (CBDM Results): 50% self-consumption, 0% export and installation of PV on 100% of usable roof space . This scenario demonstrates the potential option for, and impact of, zero export agreements with the electricity Distribution Network Operator (DNO).

Table 8: (CBDM) Scenario 4. 50% self-consumption, 0% export and installation of PV on 100% of usable roof space . This scenario demonstrates the potential option for, and impact of, zero export agreements with the electricity Distribution Network Operator (DNO).)

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	58.8	33,727	168	16,864	6.3	682,818	2.4%	£59,748	£3,187	18.75
2	The Plaza	257,526	156.5	96,435	447	48,218	17.9	209,309	18.7%	£158,973	£9,113	17.44
5	Causeway Exchange	431,155	76.7	39,868	219	19,934	7.4	411,221	4.6%	£77,886	£3,768	20.67
7	Adelaide House	576,450	91.4	59,710	261	29,855	11.1	546,595	5.2%	£92,823	£5,643	16.45
13	Belfast City Council	925,435	299.6	162,002	856	81,001	30.0	844,434	8.8%	£304,431	£15,309	19.89
14	Ulster Hall	248,217	165.9	106,406	474	53,203	19.7	195,014	21.4%	£168,575	£10,055	16.76
15	Cecil Ward	466,475	19.3	6,355	55	3,178	1.2	463,298	0.7%	£19,560	£601	32.57
16	St Georges Market	218,861	270.2	167,568	772	83,784	31.1	135,077	38.3%	£274,557	£15,835	17.34
17	Shankill Leisure Centre	401,128	212.8	142,322	608	71,161	26.4	329,967	17.7%	£216,231	£13,449	16.08
18	Grove Wellbeing Centre	783,600	743.8	499,248	2,125	249,624	92.6	533,976	31.9%	£755,743	£47,179	16.02
19	Duncrue Complex	958,477	566.0	396,188	1,617	198,094	73.5	760,383	20.7%	£575,076	£37,440	15.36
20	Ozone Leisure Centre	194,093	615.3	421,834	1,758	210,917	78.2	-16,824	108.7%	£625,222	£39,863	15.68
21	GLL Connswater Gym, Unit 11	166,313	193.9	131,673	554	65,837	24.4	100,477	39.6%	£197,027	£12,443	15.83

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Connswater Shopping Centre											
22	Whiterock Leisure Centre	328,931	57.8	37,505	165	18,753	7.0	310,179	5.7%	£58,681	£3,544	16.56
23	Morton Community Centre	54,447	98.7	65,963	282	32,982	12.2	21,466	60.6%	£100,292	£6,234	16.09
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	46,693	17.3	64,669	41.9%	£136,567	£8,825	15.48
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	169,165	62.7	213,664	44.2%	£490,077	£31,972	15.33
28	Public Records Office of Northern Ireland	963,163	207.6	135,109	593	67,555	25.1	895,609	7.0%	£210,897	£12,768	16.52
35	106-108 Hollywood Road	149,447	33.6	22,882	96	11,441	4.2	138,006	7.7%	£34,142	£2,162	15.79
43	Royal Victoria Hospital - New Maternity	989,645	169.1	104,731	483	52,366	19.4	937,280	5.3%	£171,776	£9,897	17.36
44	Royal Victoria Hospital - Kelvin	366,106	401.1	247,949	1,146	123,975	46.0	242,132	33.9%	£407,568	£23,431	17.39
47	Belfast City Hospital - Cancer Centre	4,409,518	209.3	138,460	598	69,230	25.7	4,340,288	1.6%	£212,675	£13,084	16.25
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	148,767	55.2	- 148,767	No data	£461,270	£28,117	16.41

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	164,309	60.9	- 164,309	No data	£491,144	£31,054	15.82
51	Mater Hospital - McAuley	1,133,827	292.6	203,489	836	101,745	37.7	1,032,083	9.0%	£297,318	£19,230	15.46
52	Mater Hospital - Dempsey	2,426,201	12.6	8,090	36	4,045	1.5	2,422,156	0.2%	£12,803	£765	16.75
53	Mater Hospital - Dorrian	522,942	67.2	40,375	192	20,188	7.5	502,755	3.9%	£68,284	£3,815	17.90
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	646.8	419,747	1,848	209,874	77.8	957,401	18.0%	£657,230	£39,666	16.57
58	Ulster Museum	1,031,844	263.2	169,530	752	84,765	31.4	947,079	8.2%	£267,444	£16,021	16.69
69	Anon ID: 1	3,588	4.2	2,604	12	1,302	0.5	2,286	36.3%	£4,268	£474	9.01
70	Anon ID: 2	3,588	4.9	3,170	14	1,585	0.6	2,003	44.2%	£4,979	£577	8.63
71	Anon ID: 3	3,588	5.6	3,433	16	1,717	0.6	1,872	47.8%	£5,690	£625	9.11
72	Anon ID: 4	3,588	7.7	3,700	22	1,850	0.7	1,738	51.6%	£7,824	£673	11.62
73	Anon ID: 5	3,588	4.2	2,710	12	1,355	0.5	2,233	37.8%	£4,268	£493	8.65
74	Anon ID: 6	3,588	4.9	3,039	14	1,520	0.6	2,069	42.3%	£4,979	£553	9.00
75	Anon ID: 7	3,588	5.6	3,430	16	1,715	0.6	1,873	47.8%	£5,690	£624	9.12

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	5.6	3,415	16	1,708	0.6	1,881	47.6%	£5,690	£621	9.16
77	Anon ID: 9	3,588	4.2	2,530	12	1,265	0.5	2,323	35.3%	£4,268	£460	9.27
78	Anon ID: 10	3,588	5.6	3,391	16	1,696	0.6	1,893	47.3%	£5,690	£617	9.22
79	Anon ID: 11	3,588	5.6	3,382	16	1,691	0.6	1,897	47.1%	£5,690	£615	9.25
80	Anon ID: 12	3,588	5.6	3,384	16	1,692	0.6	1,896	47.2%	£5,690	£616	9.24
81	Anon ID: 13	3,588	5.6	3,390	16	1,695	0.6	1,893	47.2%	£5,690	£617	9.22
82	Anon ID: 14	3,588	5.6	3,402	16	1,701	0.6	1,887	47.4%	£5,690	£619	9.19
83	Anon ID: 15	3,588	5.6	3,436	16	1,718	0.6	1,870	47.9%	£5,690	£625	9.10
84	Anon ID: 16	3,588	5.6	3,559	16	1,780	0.7	1,809	49.6%	£5,690	£648	8.79
85	Anon ID: 17	3,588	7.0	4,223	20	2,112	0.8	1,477	58.8%	£7,113	£769	9.26
86	Anon ID: 18	3,588	3.2	1,905	9	953	0.4	2,636	26.5%	£3,201	£347	9.23
87	Anon ID: 19	3,588	3.5	2,160	10	1,080	0.4	2,508	30.1%	£3,556	£393	9.05
88	Anon ID: 20	3,588	8.4	5,088	24	2,544	0.9	1,044	70.9%	£8,535	£926	9.22
89	Shankill Road Library	25,844	36.1	20,110	103	10,055	3.7	15,789	38.9%	£36,631	£1,900	19.28
90	Fall Road Library	22,973	51.1	29,192	146	14,596	5.4	8,377	63.5%	£51,924	£2,759	18.82
91	Ormeau Road Library	23,942	32.2	22,504	92	11,252	4.2	12,690	47.0%	£32,719	£2,127	15.39

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	46.9	30,895	134	15,448	5.7	160,030	8.8%	£47,656	£2,920	16.32
93	Woodstock Library	13,670	3.5	2,431	10	1,216	0.5	12,454	8.9%	£3,556	£230	15.48
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	302.8	207,403	865	103,702	38.5	296,716	25.9%	£307,632	£19,600	15.70
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.9	268,755	1,131	134,378	49.8	365,077	26.9%	£402,233	£25,397	15.84
Totals / Averages		21,598,484	8,459.9	5,561,672	24,171	2,780,836	1,031.4	18,817,648	12.9%	£8,596,265	£531,296	16.18

Scenario 5 (SAP Results): 100% self-consumption and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 9: (SAP) Scenario 5. 100% self-consumption and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	32.9	28,304	94	28,304	10.5	671,377	4.0%	£33,431	£5,349	6.25
2	The Plaza	257,526	120.1	97,791	343	97,791	36.3	159,735	38.0%	£121,986	£18,482	6.60
5	Causeway Exchange	431,155	15.1	9,476	43	9,476	3.5	421,679	2.2%	£15,293	£1,791	8.54
7	Adelaide House	576,450	51.1	52,164	146	52,164	19.3	524,286	9.0%	£51,924	£9,859	5.27
13	Belfast City Council	925,435	82.6	55,969	236	55,969	20.8	869,466	6.0%	£83,932	£10,578	7.93
14	Ulster Hall	248,217	94.5	83,986	270	83,986	31.2	164,231	33.8%	£96,024	£15,873	6.05
15	Cecil Ward	466,475	1.8	1,175	5	1,175	0.4	465,300	0.3%	£1,778	£222	8.01
16	St Georges Market	218,861	162.1	128,204	463	128,204	47.6	90,657	58.6%	£164,663	£24,231	6.80
17	Shankill Leisure Centre	401,128	179.2	162,407	512	162,407	60.2	238,721	40.5%	£182,090	£30,695	5.93
18	Grove Wellbeing Centre	783,600	671.0	646,069	1,917	646,069	239.6	137,531	82.4%	£681,769	£122,107	5.58
19	Duncrue Complex	958,477	566.0	529,345	1,617	529,345	196.3	429,132	55.2%	£575,076	£100,046	5.75
20	Ozone Leisure Centre	194,093	597.5	544,129	1,707	544,129	201.8	- 350,036	280.3%	£607,084	£102,840	5.90
21	GLL Connswater Gym, Unit 11 Connswater	166,313	177.1	165,798	506	165,798	61.5	515	99.7%	£179,956	£31,336	5.74

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	37.5	31,312	107	31,312	11.6	297,619	9.5%	£38,054	£5,918	6.43
23	Morton Community Centre	54,447	90.7	79,699	259	79,699	29.6	- 25,252	146.4%	£92,112	£15,063	6.12
25	Department for Communities Offices, James House	111,361	128.5	123,091	367	123,091	45.7	- 11,730	110.5%	£130,521	£23,264	5.61
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	490,568	182.0	- 107,740	128.1%	£490,077	£92,717	5.29
28	Public Records Office of Northern Ireland	963,163	192.5	177,600	550	177,600	65.9	785,563	18.4%	£195,604	£33,566	5.83
35	106-108 Holywood Road	149,447	29.8	24,310	85	24,310	9.0	125,137	16.3%	£30,230	£4,595	6.58
43	Royal Victoria Hospital - New Maternity	989,645	127.8	104,390	365	104,390	38.7	885,255	10.5%	£129,810	£19,730	6.58
44	Royal Victoria Hospital - Kelvin	366,106	266.4	240,205	761	240,205	89.1	125,901	65.6%	£270,645	£45,399	5.96

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	180.3	166,176	515	166,176	61.6	4,243,342	3.8%	£183,157	£31,407	5.83
48	Belfast City Hospital - Multi Storey Car Park 2	-	287.4	234,806	821	234,806	87.1	- 234,806	No data	£291,984	£44,378	6.58
49	Belfast City Hospital - Multi Storey Car Park 1	-	480.2	418,733	1,372	418,733	155.3	- 418,733	No data	£487,943	£79,141	6.17
51	Mater Hospital - McAuley	1,133,827	257.6	249,187	736	249,187	92.4	884,640	22.0%	£261,754	£47,096	5.56
52	Mater Hospital - Dempsey	2,426,201	10.9	8,866	31	8,866	3.3	2,417,335	0.4%	£11,025	£1,676	6.58
53	Mater Hospital - Dorrian	522,942	22.8	18,446	65	18,446	6.8	504,496	3.5%	£23,117	£3,486	6.63
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	516.3	469,717	1,475	469,717	174.2	697,557	40.2%	£524,575	£88,777	5.91
58	Ulster Museum	1,031,844	208.3	192,170	595	192,170	71.3	839,674	18.6%	£211,608	£36,320	5.83
69	Anon ID: 1	3,588	2.1	1,878	6	1,878	0.7	1,710	52.3%	£2,134	£684	3.12
70	Anon ID: 2	3,588	2.8	2,504	8	2,504	0.9	1,084	69.8%	£2,845	£911	3.12
71	Anon ID: 3	3,588	2.8	3,160	8	3,160	1.2	428	88.1%	£2,845	£1,150	2.47

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	2.1	1,188	6	1,188	0.4	2,400	33.1%	£2,134	£432	4.93
73	Anon ID: 5	3,588	2.5	2,219	7	2,219	0.8	1,369	61.8%	£2,490	£808	3.08
74	Anon ID: 6	3,588	2.5	2,226	7	2,226	0.8	1,362	62.0%	£2,490	£810	3.07
75	Anon ID: 7	3,588	2.8	3,216	8	3,216	1.2	372	89.6%	£2,845	£1,171	2.43
76	Anon ID: 8	3,588	2.8	3,240	8	3,240	1.2	348	90.3%	£2,845	£1,179	2.41
77	Anon ID: 9	3,588	2.1	2,406	6	2,406	0.9	1,182	67.1%	£2,134	£876	2.44
78	Anon ID: 10	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
79	Anon ID: 11	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
80	Anon ID: 12	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
81	Anon ID: 13	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
82	Anon ID: 14	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
83	Anon ID: 15	3,588	2.8	2,568	8	2,568	1.0	1,020	71.6%	£2,845	£935	3.04
84	Anon ID: 16	3,588	2.8	3,056	8	3,056	1.1	532	85.2%	£2,845	£1,112	2.56
85	Anon ID: 17	3,588	2.8	3,128	8	3,128	1.2	460	87.2%	£2,845	£1,139	2.50
86	Anon ID: 18	3,588	1.4	1,600	4	1,600	0.6	1,988	44.6%	£1,423	£582	2.44
87	Anon ID: 19	3,588	1.4	1,524	4	1,524	0.6	2,064	42.5%	£1,423	£555	2.56

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	4.2	3,720	12	3,720	1.4	- 132	103.7%	£4,268	£1,354	3.15
89	Shankill Road Library	25,844	9.8	9,328	28	9,328	3.5	16,516	36.1%	£9,958	£1,763	5.65
90	Fall Road Library	22,973	20.7	20,393	59	20,393	7.6	2,580	88.8%	£20,983	£3,854	5.44
91	Ormeau Road Library	23,942	31.9	31,493	91	31,493	11.7	- 7,551	131.5%	£32,364	£5,952	5.44
92	Belfast Central Library	175,478	35.4	30,164	101	30,164	11.2	145,314	17.2%	£35,920	£5,701	6.30
93	Woodstock Library	13,670	3.5	3,570	10	3,570	1.3	10,100	26.1%	£3,556	£675	5.27
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	262.2	244,749	749	244,749	90.8	155,669	61.1%	£266,377	£46,258	5.76
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	360.2	318,935	1,029	318,935	118.3	180,520	63.9%	£365,957	£60,279	6.07
Totals / Averages		21,598,484	6,844.6	6,243,198	19,556	6,243,198	2,315.6	15,355,286	28.9%	£6,954,969	£1,188,796	5.85

Scenario 5 (CBDM Results): 100% self-consumption and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 10: (CBDM) Scenario 5. 100% self-consumption and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	45.9	30,868	131	30,868	11.4	668,813	4.4%	£46,589	£5,834	7.99
2	The Plaza	257,526	119.0	78,483	340	78,483	29.1	179,043	30.5%	£120,919	£14,833	8.15
5	Causeway Exchange	431,155	48.7	28,099	139	28,099	10.4	403,056	6.5%	£49,434	£5,311	9.31
7	Adelaide House	576,450	87.9	57,858	251	57,858	21.5	518,592	10.0%	£89,267	£10,935	8.16
13	Belfast City Council	925,435	192.9	118,100	551	118,100	43.8	807,335	12.8%	£195,960	£22,321	8.78
14	Ulster Hall	248,217	115.2	79,967	329	79,967	29.7	168,250	32.2%	£117,007	£15,114	7.74
15	Cecil Ward	466,475	5.6	3,373	16	3,373	1.3	463,102	0.7%	£5,690	£637	8.93
16	St Georges Market	218,861	267.1	165,900	763	165,900	61.5	52,961	75.8%	£271,356	£31,355	8.65
17	Shankill Leisure Centre	401,128	199.5	136,083	570	136,083	50.5	265,045	33.9%	£202,717	£25,720	7.88
18	Grove Wellbeing Centre	783,600	702.5	479,345	2,007	479,345	177.8	304,255	61.2%	£713,777	£90,596	7.88
19	Duncrue Complex	958,477	566.0	396,188	1,617	396,188	146.9	562,289	41.3%	£575,076	£74,880	7.68
20	Ozone Leisure Centre	194,093	598.9	414,156	1,711	414,156	153.6	- 220,063	213.4%	£608,506	£78,275	7.77
21	GLL Connswater Gym, Unit 11 Connswater	166,313	192.9	131,138	551	131,138	48.6	35,175	78.9%	£195,960	£24,785	7.91

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	53.2	35,275	152	35,275	13.1	293,656	10.7%	£54,058	£6,667	8.11
23	Morton Community Centre	54,447	95.2	64,231	272	64,231	23.8	- 9,784	118.0%	£96,735	£12,140	7.97
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	93,385	34.6	17,976	83.9%	£136,567	£17,650	7.74
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	338,329	125.5	44,499	88.4%	£490,077	£63,944	7.66
28	Public Records Office of Northern Ireland	963,163	205.5	134,349	587	134,349	49.8	828,814	13.9%	£208,763	£25,392	8.22
35	106-108 Holywood Road	149,447	33.6	22,882	96	22,882	8.5	126,565	15.3%	£34,142	£4,325	7.89
43	Royal Victoria Hospital - New Maternity	989,645	154.0	97,667	440	97,667	36.2	891,978	9.9%	£156,483	£18,459	8.48
44	Royal Victoria Hospital - Kelvin	366,106	330.8	218,397	945	218,397	81.0	147,709	59.7%	£336,083	£41,277	8.14
47	Belfast City Hospital - Cancer Centre	4,409,518	199.9	133,674	571	133,674	49.6	4,275,844	3.0%	£203,073	£25,264	8.04
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	297,534	110.4	- 297,534	No data	£461,270	£56,234	8.20

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	328,617	121.9	- 328,617	No data	£491,144	£62,109	7.91
51	Mater Hospital - McAuley	1,133,827	280.7	197,744	802	197,744	73.3	936,083	17.4%	£285,226	£37,374	7.63
52	Mater Hospital - Dempsey	2,426,201	11.6	7,534	33	7,534	2.8	2,418,667	0.3%	£11,736	£1,424	8.24
53	Mater Hospital - Dorrian	522,942	52.2	32,882	149	32,882	12.2	490,060	6.3%	£52,991	£6,215	8.53
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	575.1	389,891	1,643	389,891	144.6	777,383	33.4%	£584,323	£73,689	7.93
58	Ulster Museum	1,031,844	232.8	156,482	665	156,482	58.0	875,362	15.2%	£236,503	£29,575	8.00
69	Anon ID: 1	3,588	2.1	1,579	6	1,579	0.6	2,009	44.0%	£2,134	£575	3.71
70	Anon ID: 2	3,588	2.8	2,117	8	2,117	0.8	1,471	59.0%	£2,845	£771	3.69
71	Anon ID: 3	3,588	2.8	2,168	8	2,168	0.8	1,420	60.4%	£2,845	£789	3.61
72	Anon ID: 4	3,588	2.1	1,326	6	1,326	0.5	2,262	37.0%	£2,134	£483	4.42
73	Anon ID: 5	3,588	2.5	1,854	7	1,854	0.7	1,734	51.7%	£2,490	£675	3.69
74	Anon ID: 6	3,588	2.5	1,856	7	1,856	0.7	1,732	51.7%	£2,490	£676	3.69
75	Anon ID: 7	3,588	2.8	2,212	8	2,212	0.8	1,376	61.6%	£2,845	£805	3.53

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	2.8	2,219	8	2,219	0.8	1,369	61.8%	£2,845	£808	3.52
77	Anon ID: 9	3,588	2.1	1,644	6	1,644	0.6	1,944	45.8%	£2,134	£598	3.57
78	Anon ID: 10	3,588	2.8	2,115	8	2,115	0.8	1,473	58.9%	£2,845	£770	3.70
79	Anon ID: 11	3,588	2.8	2,108	8	2,108	0.8	1,480	58.8%	£2,845	£767	3.71
80	Anon ID: 12	3,588	2.8	2,108	8	2,108	0.8	1,480	58.8%	£2,845	£767	3.71
81	Anon ID: 13	3,588	2.8	2,117	8	2,117	0.8	1,471	59.0%	£2,845	£771	3.69
82	Anon ID: 14	3,588	2.8	2,130	8	2,130	0.8	1,458	59.4%	£2,845	£775	3.67
83	Anon ID: 15	3,588	2.8	2,118	8	2,118	0.8	1,470	59.0%	£2,845	£771	3.69
84	Anon ID: 16	3,588	2.8	2,195	8	2,195	0.8	1,393	61.2%	£2,845	£799	3.56
85	Anon ID: 17	3,588	2.8	2,189	8	2,189	0.8	1,399	61.0%	£2,845	£797	3.57
86	Anon ID: 18	3,588	1.4	1,105	4	1,105	0.4	2,483	30.8%	£1,423	£402	3.54
87	Anon ID: 19	3,588	1.4	1,098	4	1,098	0.4	2,490	30.6%	£1,423	£400	3.56
88	Anon ID: 20	3,588	4.2	3,135	12	3,135	1.2	453	87.4%	£4,268	£1,141	3.74
89	Shankill Road Library	25,844	17.5	11,505	50	11,505	4.3	14,339	44.5%	£17,782	£2,174	8.18
90	Fall Road Library	22,973	17.9	13,355	51	13,355	5.0	9,618	58.1%	£18,138	£2,524	7.19
91	Ormeau Road Library	23,942	32.2	22,504	92	22,504	8.3	1,438	94.0%	£32,719	£4,253	7.69

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	45.9	30,363	131	30,363	11.3	145,115	17.3%	£46,589	£5,739	8.12
93	Woodstock Library	13,670	3.5	2,431	10	2,431	0.9	11,239	17.8%	£3,556	£459	7.74
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	301.4	206,668	861	206,668	76.7	193,750	51.6%	£306,209	£39,060	7.84
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.5	268,629	1,130	268,629	99.6	230,826	53.8%	£401,877	£50,771	7.92
Totals / Averages		21,598,484	7,785.4	5,263,279	22,244	5,263,279	1,952.2	16,335,205	24.4%	£7,910,940	£1,001,653	7.90

Scenario 6 (SAP Results): 75% self-consumption, 25% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 11: (SAP) Scenario 6. 6.75% self-consumption, 25% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	32.9	28,304	94	21,228	7.9	678,453	3.0%	£33,431	£4,362	7.66
2	The Plaza	257,526	120.1	97,791	343	73,343	27.2	184,183	28.5%	£121,986	£15,072	8.09
5	Causeway Exchange	431,155	15.1	9,476	43	7,107	2.6	424,048	1.6%	£15,293	£1,460	10.47
7	Adelaide House	576,450	51.1	52,164	146	39,123	14.5	537,327	6.8%	£51,924	£8,040	6.46
13	Belfast City Council	925,435	82.6	55,969	236	41,977	15.6	883,458	4.5%	£83,932	£8,626	9.73
14	Ulster Hall	248,217	94.5	83,986	270	62,990	23.4	185,228	25.4%	£96,024	£12,944	7.42
15	Cecil Ward	466,475	1.8	1,175	5	881	0.3	465,594	0.2%	£1,778	£181	9.82
16	St Georges Market	218,861	162.1	128,204	463	96,153	35.7	122,708	43.9%	£164,663	£19,759	8.33
17	Shankill Leisure Centre	401,128	179.2	162,407	512	121,805	45.2	279,323	30.4%	£182,090	£25,031	7.27
18	Grove Wellbeing Centre	783,600	671.0	646,069	1,917	484,552	179.7	299,048	61.8%	£681,769	£99,575	6.85
19	Duncrue Complex	958,477	566.0	529,345	1,617	397,009	147.3	561,468	41.4%	£575,076	£81,585	7.05
20	Ozone Leisure Centre	194,093	597.5	544,129	1,707	408,097	151.4	- 214,004	210.3%	£607,084	£83,864	7.24
21	GLL Connswater Gym, Unit 11 Connswater	166,313	177.1	165,798	506	124,349	46.1	41,965	74.8%	£179,956	£25,554	7.04

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	37.5	31,312	107	23,484	8.7	305,447	7.1%	£38,054	£4,826	7.89
23	Morton Community Centre	54,447	90.7	79,699	259	59,774	22.2	- 5,327	109.8%	£92,112	£12,284	7.50
25	Department for Communities Offices, James House	111,361	128.5	123,091	367	92,318	34.2	19,043	82.9%	£130,521	£18,971	6.88
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	367,926	136.5	14,902	96.1%	£490,077	£75,609	6.48
28	Public Records Office of Northern Ireland	963,163	192.5	177,600	550	133,200	49.4	829,963	13.8%	£195,604	£27,373	7.15
35	106-108 Holywood Road	149,447	29.8	24,310	85	18,233	6.8	131,215	12.2%	£30,230	£3,747	8.07
43	Royal Victoria Hospital - New Maternity	989,645	127.8	104,390	365	78,293	29.0	911,353	7.9%	£129,810	£16,089	8.07
44	Royal Victoria Hospital - Kelvin	366,106	266.4	240,205	761	180,154	66.8	185,952	49.2%	£270,645	£37,022	7.31

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	180.3	166,176	515	124,632	46.2	4,284,886	2.8%	£183,157	£25,612	7.15
48	Belfast City Hospital - Multi Storey Car Park 2	-	287.4	234,806	821	176,105	65.3	- 176,105	No data	£291,984	£36,189	8.07
49	Belfast City Hospital - Multi Storey Car Park 1	-	480.2	418,733	1,372	314,050	116.5	- 314,050	No data	£487,943	£64,537	7.56
51	Mater Hospital - McAuley	1,133,827	257.6	249,187	736	186,890	69.3	946,937	16.5%	£261,754	£38,406	6.82
52	Mater Hospital - Dempsey	2,426,201	10.9	8,866	31	6,650	2.5	2,419,552	0.3%	£11,025	£1,366	8.07
53	Mater Hospital - Dorrian	522,942	22.8	18,446	65	13,835	5.1	509,108	2.6%	£23,117	£2,843	8.13
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	516.3	469,717	1,475	352,288	130.7	814,986	30.2%	£524,575	£72,395	7.25
58	Ulster Museum	1,031,844	208.3	192,170	595	144,128	53.5	887,716	14.0%	£211,608	£29,618	7.14
69	Anon ID: 1	3,588	2.1	1,878	6	1,409	0.5	2,180	39.3%	£2,134	£536	3.98
70	Anon ID: 2	3,588	2.8	2,504	8	1,878	0.7	1,710	52.3%	£2,845	£715	3.98
71	Anon ID: 3	3,588	2.8	3,160	8	2,370	0.9	1,218	66.1%	£2,845	£902	3.16

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	2.1	1,188	6	891	0.3	2,697	24.8%	£2,134	£339	6.29
73	Anon ID: 5	3,588	2.5	2,219	7	1,664	0.6	1,924	46.4%	£2,490	£633	3.93
74	Anon ID: 6	3,588	2.5	2,226	7	1,670	0.6	1,919	46.5%	£2,490	£635	3.92
75	Anon ID: 7	3,588	2.8	3,216	8	2,412	0.9	1,176	67.2%	£2,845	£918	3.10
76	Anon ID: 8	3,588	2.8	3,240	8	2,430	0.9	1,158	67.7%	£2,845	£925	3.08
77	Anon ID: 9	3,588	2.1	2,406	6	1,805	0.7	1,784	50.3%	£2,134	£687	3.11
78	Anon ID: 10	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
79	Anon ID: 11	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
80	Anon ID: 12	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
81	Anon ID: 13	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
82	Anon ID: 14	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
83	Anon ID: 15	3,588	2.8	2,568	8	1,926	0.7	1,662	53.7%	£2,845	£733	3.88
84	Anon ID: 16	3,588	2.8	3,056	8	2,292	0.9	1,296	63.9%	£2,845	£872	3.26
85	Anon ID: 17	3,588	2.8	3,128	8	2,346	0.9	1,242	65.4%	£2,845	£893	3.19
86	Anon ID: 18	3,588	1.4	1,600	4	1,200	0.4	2,388	33.4%	£1,423	£457	3.12
87	Anon ID: 19	3,588	1.4	1,524	4	1,143	0.4	2,445	31.9%	£1,423	£435	3.27

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	4.2	3,720	12	2,790	1.0	798	77.8%	£4,268	£1,062	4.02
89	Shankill Road Library	25,844	9.8	9,328	28	6,996	2.6	18,848	27.1%	£9,958	£1,438	6.93
90	Fall Road Library	22,973	20.7	20,393	59	15,295	5.7	7,678	66.6%	£20,983	£3,143	6.68
91	Ormeau Road Library	23,942	31.9	31,493	91	23,620	8.8	322	98.7%	£32,364	£4,854	6.67
92	Belfast Central Library	175,478	35.4	30,164	101	22,623	8.4	152,855	12.9%	£35,920	£4,649	7.73
93	Woodstock Library	13,670	3.5	3,570	10	2,678	1.0	10,992	19.6%	£3,556	£550	6.46
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	262.2	244,749	749	183,562	68.1	216,856	45.8%	£266,377	£37,722	7.06
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	360.2	318,935	1,029	239,201	88.7	260,254	47.9%	£365,957	£49,156	7.44
Totals / Averages		21,598,484	6,844.6	6,243,198	19,556	4,682,399	1,736.7	16,916,085	21.7%	£6,954,969	£968,857	7.18

Scenario 6 (CBDM Results): 75% self-consumption, 25% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 12: (CBDM) Scenario 6. 75% self-consumption, 25% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	45.9	30,868	131	23,151	8.6	676,530	3.3%	£46,589	£4,758	9.79
2	The Plaza	257,526	119.0	78,483	340	58,862	21.8	198,664	22.9%	£120,919	£12,096	10.00
5	Causeway Exchange	431,155	48.7	28,099	139	21,074	7.8	410,081	4.9%	£49,434	£4,331	11.41
7	Adelaide House	576,450	87.9	57,858	251	43,394	16.1	533,057	7.5%	£89,267	£8,917	10.01
13	Belfast City Council	925,435	192.9	118,100	551	88,575	32.9	836,860	9.6%	£195,960	£18,202	10.77
14	Ulster Hall	248,217	115.2	79,967	329	59,975	22.2	188,242	24.2%	£117,007	£12,325	9.49
15	Cecil Ward	466,475	5.6	3,373	16	2,530	0.9	463,945	0.5%	£5,690	£520	10.95
16	St Georges Market	218,861	267.1	165,900	763	124,425	46.1	94,436	56.9%	£271,356	£25,569	10.61
17	Shankill Leisure Centre	401,128	199.5	136,083	570	102,062	37.9	299,066	25.4%	£202,717	£20,974	9.67
18	Grove Wellbeing Centre	783,600	702.5	479,345	2,007	359,509	133.3	424,091	45.9%	£713,777	£73,879	9.66
19	Duncrue Complex	958,477	566.0	396,188	1,617	297,141	110.2	661,336	31.0%	£575,076	£61,062	9.42
20	Ozone Leisure Centre	194,093	598.9	414,156	1,711	310,617	115.2	- 116,524	160.0%	£608,506	£63,832	9.53
21	GLL Connswater Gym, Unit 11 Connswater	166,313	192.9	131,138	551	98,354	36.5	67,960	59.1%	£195,960	£20,212	9.70

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	53.2	35,275	152	26,456	9.8	302,475	8.0%	£54,058	£5,437	9.94
23	Morton Community Centre	54,447	95.2	64,231	272	48,173	17.9	6,274	88.5%	£96,735	£9,900	9.77
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	70,039	26.0	41,322	62.9%	£136,567	£14,393	9.49
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	253,747	94.1	129,082	66.3%	£490,077	£52,145	9.40
28	Public Records Office of Northern Ireland	963,163	205.5	134,349	587	100,762	37.4	862,402	10.5%	£208,763	£20,707	10.08
35	106-108 Holywood Road	149,447	33.6	22,882	96	17,162	6.4	132,286	11.5%	£34,142	£3,527	9.68
43	Royal Victoria Hospital - New Maternity	989,645	154.0	97,667	440	73,250	27.2	916,395	7.4%	£156,483	£15,053	10.40
44	Royal Victoria Hospital - Kelvin	366,106	330.8	218,397	945	163,798	60.8	202,308	44.7%	£336,083	£33,660	9.98
47	Belfast City Hospital - Cancer Centre	4,409,518	199.9	133,674	571	100,256	37.2	4,309,263	2.3%	£203,073	£20,603	9.86
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	223,151	82.8	- 223,151	No data	£461,270	£45,857	10.06

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	246,463	91.4	- 246,463	No data	£491,144	£50,648	9.70
51	Mater Hospital - McAuley	1,133,827	280.7	197,744	802	148,308	55.0	985,519	13.1%	£285,226	£30,477	9.36
52	Mater Hospital - Dempsey	2,426,201	11.6	7,534	33	5,651	2.1	2,420,551	0.2%	£11,736	£1,161	10.11
53	Mater Hospital - Dorrian	522,942	52.2	32,882	149	24,662	9.1	498,281	4.7%	£52,991	£5,068	10.46
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	575.1	389,891	1,643	292,418	108.5	874,856	25.1%	£584,323	£60,092	9.72
58	Ulster Museum	1,031,844	232.8	156,482	665	117,362	43.5	914,482	11.4%	£236,503	£24,118	9.81
69	Anon ID: 1	3,588	2.1	1,579	6	1,184	0.4	2,404	33.0%	£2,134	£451	4.74
70	Anon ID: 2	3,588	2.8	2,117	8	1,588	0.6	2,000	44.3%	£2,845	£604	4.71
71	Anon ID: 3	3,588	2.8	2,168	8	1,626	0.6	1,962	45.3%	£2,845	£619	4.60
72	Anon ID: 4	3,588	2.1	1,326	6	995	0.4	2,594	27.7%	£2,134	£378	5.64
73	Anon ID: 5	3,588	2.5	1,854	7	1,391	0.5	2,198	38.8%	£2,490	£529	4.71
74	Anon ID: 6	3,588	2.5	1,856	7	1,392	0.5	2,196	38.8%	£2,490	£530	4.70
75	Anon ID: 7	3,588	2.8	2,212	8	1,659	0.6	1,929	46.2%	£2,845	£631	4.51

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	2.8	2,219	8	1,664	0.6	1,924	46.4%	£2,845	£633	4.49
77	Anon ID: 9	3,588	2.1	1,644	6	1,233	0.5	2,355	34.4%	£2,134	£469	4.55
78	Anon ID: 10	3,588	2.8	2,115	8	1,586	0.6	2,002	44.2%	£2,845	£604	4.71
79	Anon ID: 11	3,588	2.8	2,108	8	1,581	0.6	2,007	44.1%	£2,845	£602	4.73
80	Anon ID: 12	3,588	2.8	2,108	8	1,581	0.6	2,007	44.1%	£2,845	£602	4.73
81	Anon ID: 13	3,588	2.8	2,117	8	1,588	0.6	2,000	44.3%	£2,845	£604	4.71
82	Anon ID: 14	3,588	2.8	2,130	8	1,598	0.6	1,991	44.5%	£2,845	£608	4.68
83	Anon ID: 15	3,588	2.8	2,118	8	1,589	0.6	2,000	44.3%	£2,845	£604	4.71
84	Anon ID: 16	3,588	2.8	2,195	8	1,646	0.6	1,942	45.9%	£2,845	£626	4.54
85	Anon ID: 17	3,588	2.8	2,189	8	1,642	0.6	1,946	45.8%	£2,845	£625	4.55
86	Anon ID: 18	3,588	1.4	1,105	4	829	0.3	2,759	23.1%	£1,423	£315	4.51
87	Anon ID: 19	3,588	1.4	1,098	4	824	0.3	2,765	23.0%	£1,423	£313	4.54
88	Anon ID: 20	3,588	4.2	3,135	12	2,351	0.9	1,237	65.5%	£4,268	£895	4.77
89	Shankill Road Library	25,844	17.5	11,505	50	8,629	3.2	17,215	33.4%	£17,782	£1,773	10.03
90	Fall Road Library	22,973	17.9	13,355	51	10,016	3.7	12,956	43.6%	£18,138	£2,058	8.81
91	Ormeau Road Library	23,942	32.2	22,504	92	16,878	6.3	7,064	70.5%	£32,719	£3,468	9.43

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	45.9	30,363	131	22,772	8.4	152,706	13.0%	£46,589	£4,680	9.96
93	Woodstock Library	13,670	3.5	2,431	10	1,823	0.7	11,847	13.3%	£3,556	£375	9.49
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	301.4	206,668	861	155,001	57.5	245,417	38.7%	£306,209	£31,853	9.61
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.5	268,629	1,130	201,472	74.7	297,983	40.3%	£401,877	£41,402	9.71
Totals / Averages		21,598,484	7,785.4	5,263,279	22,244	3,947,459	1,464.1	17,651,024	18.3%	£7,910,940	£816,373	9.69

Scenario 7 (SAP Results): 50% self-consumption, 50% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 13: (SAP) Scenario 7. 7. 50% self-consumption, 50% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	32.9	28,304	94	14,152	5.2	685,529	2.0%	£33,431	£3,375	9.90
2	The Plaza	257,526	120.1	97,791	343	48,896	18.1	208,631	19.0%	£121,986	£11,662	10.46
5	Causeway Exchange	431,155	15.1	9,476	43	4,738	1.8	426,417	1.1%	£15,293	£1,130	13.53
7	Adelaide House	576,450	51.1	52,164	146	26,082	9.7	550,368	4.5%	£51,924	£6,221	8.35
13	Belfast City Council	925,435	82.6	55,969	236	27,985	10.4	897,451	3.0%	£83,932	£6,674	12.58
14	Ulster Hall	248,217	94.5	83,986	270	41,993	15.6	206,224	16.9%	£96,024	£10,015	9.59
15	Cecil Ward	466,475	1.8	1,175	5	588	0.2	465,888	0.1%	£1,778	£140	12.69
16	St Georges Market	218,861	162.1	128,204	463	64,102	23.8	154,759	29.3%	£164,663	£15,288	10.77
17	Shankill Leisure Centre	401,128	179.2	162,407	512	81,204	30.1	319,925	20.2%	£182,090	£19,367	9.40
18	Grove Wellbeing Centre	783,600	671.0	646,069	1,917	323,035	119.8	460,566	41.2%	£681,769	£77,044	8.85
19	Duncrue Complex	958,477	566.0	529,345	1,617	264,673	98.2	693,805	27.6%	£575,076	£63,124	9.11
20	Ozone Leisure Centre	194,093	597.5	544,129	1,707	272,065	100.9	- 77,972	140.2%	£607,084	£64,887	9.36
21	GLL Connswater Gym, Unit 11 Connswater	166,313	177.1	165,798	506	82,899	30.7	83,414	49.8%	£179,956	£19,771	9.10

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	37.5	31,312	107	15,656	5.8	313,275	4.8%	£38,054	£3,734	10.19
23	Morton Community Centre	54,447	90.7	79,699	259	39,850	14.8	14,598	73.2%	£92,112	£9,504	9.69
25	Department for Communities Offices, James House	111,361	128.5	123,091	367	61,546	22.8	49,816	55.3%	£130,521	£14,679	8.89
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	245,284	91.0	137,544	64.1%	£490,077	£58,500	8.38
28	Public Records Office of Northern Ireland	963,163	192.5	177,600	550	88,800	32.9	874,363	9.2%	£195,604	£21,179	9.24
35	106-108 Holywood Road	149,447	29.8	24,310	85	12,155	4.5	137,292	8.1%	£30,230	£2,899	10.43
43	Royal Victoria Hospital - New Maternity	989,645	127.8	104,390	365	52,195	19.4	937,450	5.3%	£129,810	£12,449	10.43
44	Royal Victoria Hospital - Kelvin	366,106	266.4	240,205	761	120,103	44.5	246,004	32.8%	£270,645	£28,644	9.45

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	180.3	166,176	515	83,088	30.8	4,326,430	1.9%	£183,157	£19,816	9.24
48	Belfast City Hospital - Multi Storey Car Park 2	-	287.4	234,806	821	117,403	43.5	- 117,403	No data	£291,984	£28,001	10.43
49	Belfast City Hospital - Multi Storey Car Park 1	-	480.2	418,733	1,372	209,367	77.7	- 209,367	No data	£487,943	£49,934	9.77
51	Mater Hospital - McAuley	1,133,827	257.6	249,187	736	124,594	46.2	1,009,234	11.0%	£261,754	£29,716	8.81
52	Mater Hospital - Dempsey	2,426,201	10.9	8,866	31	4,433	1.6	2,421,768	0.2%	£11,025	£1,057	10.43
53	Mater Hospital - Dorrian	522,942	22.8	18,446	65	9,223	3.4	513,719	1.8%	£23,117	£2,200	10.51
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	516.3	469,717	1,475	234,859	87.1	932,416	20.1%	£524,575	£56,014	9.37
58	Ulster Museum	1,031,844	208.3	192,170	595	96,085	35.6	935,759	9.3%	£211,608	£22,916	9.23
69	Anon ID: 1	3,588	2.1	1,878	6	939	0.3	2,649	26.2%	£2,134	£388	5.50
70	Anon ID: 2	3,588	2.8	2,504	8	1,252	0.5	2,336	34.9%	£2,845	£518	5.50
71	Anon ID: 3	3,588	2.8	3,160	8	1,580	0.6	2,008	44.0%	£2,845	£653	4.36

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
72	Anon ID: 4	3,588	2.1	1,188	6	594	0.2	2,994	16.6%	£2,134	£246	8.69
73	Anon ID: 5	3,588	2.5	2,219	7	1,110	0.4	2,479	30.9%	£2,490	£459	5.43
74	Anon ID: 6	3,588	2.5	2,226	7	1,113	0.4	2,475	31.0%	£2,490	£460	5.41
75	Anon ID: 7	3,588	2.8	3,216	8	1,608	0.6	1,980	44.8%	£2,845	£665	4.28
76	Anon ID: 8	3,588	2.8	3,240	8	1,620	0.6	1,968	45.2%	£2,845	£670	4.25
77	Anon ID: 9	3,588	2.1	2,406	6	1,203	0.4	2,385	33.5%	£2,134	£497	4.29
78	Anon ID: 10	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
79	Anon ID: 11	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
80	Anon ID: 12	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
81	Anon ID: 13	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
82	Anon ID: 14	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
83	Anon ID: 15	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£531	5.36
84	Anon ID: 16	3,588	2.8	3,056	8	1,528	0.6	2,060	42.6%	£2,845	£632	4.50
85	Anon ID: 17	3,588	2.8	3,128	8	1,564	0.6	2,024	43.6%	£2,845	£647	4.40
86	Anon ID: 18	3,588	1.4	1,600	4	800	0.3	2,788	22.3%	£1,423	£331	4.30
87	Anon ID: 19	3,588	1.4	1,524	4	762	0.3	2,826	21.2%	£1,423	£315	4.52

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
88	Anon ID: 20	3,588	4.2	3,720	12	1,860	0.7	1,728	51.8%	£4,268	£769	5.55
89	Shankill Road Library	25,844	9.8	9,328	28	4,664	1.7	21,180	18.0%	£9,958	£1,112	8.95
90	Fall Road Library	22,973	20.7	20,393	59	10,197	3.8	12,776	44.4%	£20,983	£2,432	8.63
91	Ormeau Road Library	23,942	31.9	31,493	91	15,747	5.8	8,195	65.8%	£32,364	£3,756	8.62
92	Belfast Central Library	175,478	35.4	30,164	101	15,082	5.6	160,396	8.6%	£35,920	£3,597	9.99
93	Woodstock Library	13,670	3.5	3,570	10	1,785	0.7	11,885	13.1%	£3,556	£426	8.35
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	262.2	244,749	749	122,375	45.4	278,043	30.6%	£266,377	£29,186	9.13
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	360.2	318,935	1,029	159,468	59.1	339,987	31.9%	£365,957	£38,033	9.62
Totals / Averages		21,598,484	6,844.6	6,243,198	19,556	3,121,599	1,157.8	18,476,885	14.5%	£6,954,969	£748,917	9.29

Scenario 7 (CBDM Results): 50% self-consumption, 50% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Table 14: (CBDM) Scenario 7. 50% self-consumption, 50% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel .

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	45.9	30,868	131	15,434	5.7	684,247	2.2%	£46,589	£3,681	12.66
2	The Plaza	257,526	119.0	78,483	340	39,242	14.6	218,285	15.2%	£120,919	£9,359	12.92
5	Causeway Exchange	431,155	48.7	28,099	139	14,050	5.2	417,106	3.3%	£49,434	£3,351	14.75
7	Adelaide House	576,450	87.9	57,858	251	28,929	10.7	547,521	5.0%	£89,267	£6,900	12.94
13	Belfast City Council	925,435	192.9	118,100	551	59,050	21.9	866,385	6.4%	£195,960	£14,083	13.91
14	Ulster Hall	248,217	115.2	79,967	329	39,984	14.8	208,234	16.1%	£117,007	£9,536	12.27
15	Cecil Ward	466,475	5.6	3,373	16	1,687	0.6	464,789	0.4%	£5,690	£402	14.15
16	St Georges Market	218,861	267.1	165,900	763	82,950	30.8	135,911	37.9%	£271,356	£19,784	13.72
17	Shankill Leisure Centre	401,128	199.5	136,083	570	68,042	25.2	333,087	17.0%	£202,717	£16,228	12.49
18	Grove Wellbeing Centre	783,600	702.5	479,345	2,007	239,673	88.9	543,928	30.6%	£713,777	£57,162	12.49
19	Duncrue Complex	958,477	566.0	396,188	1,617	198,094	73.5	760,383	20.7%	£575,076	£47,245	12.17
20	Ozone Leisure Centre	194,093	598.9	414,156	1,711	207,078	76.8	- 12,985	106.7%	£608,506	£49,388	12.32
21	GLL Connswater Gym, Unit 11 Connswater	166,313	192.9	131,138	551	65,569	24.3	100,744	39.4%	£195,960	£15,638	12.53

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Shopping Centre											
22	Whiterock Leisure Centre	328,931	53.2	35,275	152	17,638	6.5	311,294	5.4%	£54,058	£4,207	12.85
23	Morton Community Centre	54,447	95.2	64,231	272	32,116	11.9	22,332	59.0%	£96,735	£7,660	12.63
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	46,693	17.3	64,669	41.9%	£136,567	£11,136	12.26
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	169,165	62.7	213,664	44.2%	£490,077	£40,346	12.15
28	Public Records Office of Northern Ireland	963,163	205.5	134,349	587	67,175	24.9	895,989	7.0%	£208,763	£16,021	13.03
35	106-108 Holywood Road	149,447	33.6	22,882	96	11,441	4.2	138,006	7.7%	£34,142	£2,729	12.51
43	Royal Victoria Hospital - New Maternity	989,645	154.0	97,667	440	48,834	18.1	940,812	4.9%	£156,483	£11,647	13.44
44	Royal Victoria Hospital - Kelvin	366,106	330.8	218,397	945	109,199	40.5	256,908	29.8%	£336,083	£26,044	12.90
47	Belfast City Hospital - Cancer Centre	4,409,518	199.9	133,674	571	66,837	24.8	4,342,681	1.5%	£203,073	£15,941	12.74
48	Belfast City Hospital - Multi	-	454.0	297,534	1,297	148,767	55.2	- 148,767	No data	£461,270	£35,481	13.00

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
	Storey Car Park 2											
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	164,309	60.9	- 164,309	No data	£491,144	£39,188	12.53
51	Mater Hospital - McAuley	1,133,827	280.7	197,744	802	98,872	36.7	1,034,955	8.7%	£285,226	£23,581	12.10
52	Mater Hospital - Dempsey	2,426,201	11.6	7,534	33	3,767	1.4	2,422,434	0.2%	£11,736	£898	13.06
53	Mater Hospital - Dorrian	522,942	52.2	32,882	149	16,441	6.1	506,501	3.1%	£52,991	£3,921	13.51
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	575.1	389,891	1,643	194,946	72.3	972,329	16.7%	£584,323	£46,495	12.57
58	Ulster Museum	1,031,844	232.8	156,482	665	78,241	29.0	953,603	7.6%	£236,503	£18,660	12.67
69	Anon ID: 1	3,588	2.1	1,579	6	790	0.3	2,799	22.0%	£2,134	£326	6.54
70	Anon ID: 2	3,588	2.8	2,117	8	1,059	0.4	2,530	29.5%	£2,845	£438	6.50
71	Anon ID: 3	3,588	2.8	2,168	8	1,084	0.4	2,504	30.2%	£2,845	£448	6.35
72	Anon ID: 4	3,588	2.1	1,326	6	663	0.2	2,925	18.5%	£2,134	£274	7.78
73	Anon ID: 5	3,588	2.5	1,854	7	927	0.3	2,661	25.8%	£2,490	£383	6.49
74	Anon ID: 6	3,588	2.5	1,856	7	928	0.3	2,660	25.9%	£2,490	£384	6.49
75	Anon ID: 7	3,588	2.8	2,212	8	1,106	0.4	2,482	30.8%	£2,845	£457	6.22

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
76	Anon ID: 8	3,588	2.8	2,219	8	1,110	0.4	2,479	30.9%	£2,845	£459	6.20
77	Anon ID: 9	3,588	2.1	1,644	6	822	0.3	2,766	22.9%	£2,134	£340	6.28
78	Anon ID: 10	3,588	2.8	2,115	8	1,058	0.4	2,531	29.5%	£2,845	£437	6.51
79	Anon ID: 11	3,588	2.8	2,108	8	1,054	0.4	2,534	29.4%	£2,845	£436	6.53
80	Anon ID: 12	3,588	2.8	2,108	8	1,054	0.4	2,534	29.4%	£2,845	£436	6.53
81	Anon ID: 13	3,588	2.8	2,117	8	1,059	0.4	2,530	29.5%	£2,845	£438	6.50
82	Anon ID: 14	3,588	2.8	2,130	8	1,065	0.4	2,523	29.7%	£2,845	£440	6.46
83	Anon ID: 15	3,588	2.8	2,118	8	1,059	0.4	2,529	29.5%	£2,845	£438	6.50
84	Anon ID: 16	3,588	2.8	2,195	8	1,098	0.4	2,491	30.6%	£2,845	£454	6.27
85	Anon ID: 17	3,588	2.8	2,189	8	1,095	0.4	2,494	30.5%	£2,845	£453	6.29
86	Anon ID: 18	3,588	1.4	1,105	4	553	0.2	3,036	15.4%	£1,423	£228	6.23
87	Anon ID: 19	3,588	1.4	1,098	4	549	0.2	3,039	15.3%	£1,423	£227	6.27
88	Anon ID: 20	3,588	4.2	3,135	12	1,568	0.6	2,021	43.7%	£4,268	£648	6.58
89	Shankill Road Library	25,844	17.5	11,505	50	5,753	2.1	20,091	22.3%	£17,782	£1,372	12.96
90	Fall Road Library	22,973	17.9	13,355	51	6,678	2.5	16,295	29.1%	£18,138	£1,593	11.39
91	Ormeau Road Library	23,942	32.2	22,504	92	11,252	4.2	12,690	47.0%	£32,719	£2,684	12.19

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
92	Belfast Central Library	175,478	45.9	30,363	131	15,182	5.6	160,296	8.7%	£46,589	£3,621	12.87
93	Woodstock Library	13,670	3.5	2,431	10	1,216	0.5	12,454	8.9%	£3,556	£290	12.27
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	301.4	206,668	861	103,334	38.3	297,084	25.8%	£306,209	£24,645	12.42
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.5	268,629	1,130	134,315	49.8	365,140	26.9%	£401,877	£32,034	12.55
Totals / Averages		21,598,484	7,785.4	5,263,279	22,244	2,631,640	976.1	18,966,844	12.2%	£7,910,940	£631,093	12.54

Scenario 8 (SAP Results): 50% self-consumption, 0% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel . This scenario demonstrates the potential option for, and impact of, zero export agreements with the DNO and the impact of panel viability filtering

Table 15: (SAP) Scenario 8. 50% self-consumption, 0% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel . This scenario demonstrates the potential option for, and impact of, zero export agreements with the DNO and the impact of panel viability filtering

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	32.9	28,304	94	14,152	5.2	685,529	2.0%	£33,431	£2,675	12.50
2	The Plaza	257,526	120.1	97,791	343	48,896	18.1	208,631	19.0%	£121,986	£9,241	13.20
5	Causeway Exchange	431,155	15.1	9,476	43	4,738	1.8	426,417	1.1%	£15,293	£895	17.08
7	Adelaide House	576,450	51.1	52,164	146	26,082	9.7	550,368	4.5%	£51,924	£4,929	10.53
13	Belfast City Council	925,435	82.6	55,969	236	27,985	10.4	897,451	3.0%	£83,932	£5,289	15.87
14	Ulster Hall	248,217	94.5	83,986	270	41,993	15.6	206,224	16.9%	£96,024	£7,937	12.10
15	Cecil Ward	466,475	1.8	1,175	5	588	0.2	465,888	0.1%	£1,778	£111	16.01
16	St Georges Market	218,861	162.1	128,204	463	64,102	23.8	154,759	29.3%	£164,663	£12,115	13.59
17	Shankill Leisure Centre	401,128	179.2	162,407	512	81,204	30.1	319,925	20.2%	£182,090	£15,347	11.86
18	Grove Wellbeing Centre	783,600	671.0	646,069	1,917	323,035	119.8	460,566	41.2%	£681,769	£61,054	11.17
19	Duncrue Complex	958,477	566.0	529,345	1,617	264,673	98.2	693,805	27.6%	£575,076	£50,023	11.50
20	Ozone Leisure Centre	194,093	597.5	544,129	1,707	272,065	100.9	- 77,972	140.2%	£607,084	£51,420	11.81

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
21	GLL Connswater Gym, Unit 11 Connswater Shopping Centre	166,313	177.1	165,798	506	82,899	30.7	83,414	49.8%	£179,956	£15,668	11.49
22	Whiterock Leisure Centre	328,931	37.5	31,312	107	15,656	5.8	313,275	4.8%	£38,054	£2,959	12.86
23	Morton Community Centre	54,447	90.7	79,699	259	39,850	14.8	14,598	73.2%	£92,112	£7,532	12.23
25	Department for Communities Offices, James House	111,361	128.5	123,091	367	61,546	22.8	49,816	55.3%	£130,521	£11,632	11.22
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	490,568	1,378	245,284	91.0	137,544	64.1%	£490,077	£46,359	10.57
28	Public Records Office of Northern Ireland	963,163	192.5	177,600	550	88,800	32.9	874,363	9.2%	£195,604	£16,783	11.65
35	106-108 Hollywood Road	149,447	29.8	24,310	85	12,155	4.5	137,292	8.1%	£30,230	£2,297	13.16
43	Royal Victoria Hospital - New Maternity	989,645	127.8	104,390	365	52,195	19.4	937,450	5.3%	£129,810	£9,865	13.16

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
44	Royal Victoria Hospital - Kelvin	366,106	266.4	240,205	761	120,103	44.5	246,004	32.8%	£270,645	£22,699	11.92
47	Belfast City Hospital - Cancer Centre	4,409,518	180.3	166,176	515	83,088	30.8	4,326,430	1.9%	£183,157	£15,704	11.66
48	Belfast City Hospital - Multi Storey Car Park 2	-	287.4	234,806	821	117,403	43.5	- 117,403	No data	£291,984	£22,189	13.16
49	Belfast City Hospital - Multi Storey Car Park 1	-	480.2	418,733	1,372	209,367	77.7	- 209,367	No data	£487,943	£39,570	12.33
51	Mater Hospital - McAuley	1,133,827	257.6	249,187	736	124,594	46.2	1,009,234	11.0%	£261,754	£23,548	11.12
52	Mater Hospital - Dempsey	2,426,201	10.9	8,866	31	4,433	1.6	2,421,768	0.2%	£11,025	£838	13.16
53	Mater Hospital - Dorrian	522,942	22.8	18,446	65	9,223	3.4	513,719	1.8%	£23,117	£1,743	13.26
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	516.3	469,717	1,475	234,859	87.1	932,416	20.1%	£524,575	£44,388	11.82
58	Ulster Museum	1,031,844	208.3	192,170	595	96,085	35.6	935,759	9.3%	£211,608	£18,160	11.65
69	Anon ID: 1	3,588	2.1	1,878	6	939	0.3	2,649	26.2%	£2,134	£342	6.24
70	Anon ID: 2	3,588	2.8	2,504	8	1,252	0.5	2,336	34.9%	£2,845	£456	6.24

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
71	Anon ID: 3	3,588	2.8	3,160	8	1,580	0.6	2,008	44.0%	£2,845	£575	4.95
72	Anon ID: 4	3,588	2.1	1,188	6	594	0.2	2,994	16.6%	£2,134	£216	9.87
73	Anon ID: 5	3,588	2.5	2,219	7	1,110	0.4	2,479	30.9%	£2,490	£404	6.16
74	Anon ID: 6	3,588	2.5	2,226	7	1,113	0.4	2,475	31.0%	£2,490	£405	6.15
75	Anon ID: 7	3,588	2.8	3,216	8	1,608	0.6	1,980	44.8%	£2,845	£585	4.86
76	Anon ID: 8	3,588	2.8	3,240	8	1,620	0.6	1,968	45.2%	£2,845	£590	4.83
77	Anon ID: 9	3,588	2.1	2,406	6	1,203	0.4	2,385	33.5%	£2,134	£438	4.87
78	Anon ID: 10	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
79	Anon ID: 11	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
80	Anon ID: 12	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
81	Anon ID: 13	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
82	Anon ID: 14	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
83	Anon ID: 15	3,588	2.8	2,568	8	1,284	0.5	2,304	35.8%	£2,845	£467	6.09
84	Anon ID: 16	3,588	2.8	3,056	8	1,528	0.6	2,060	42.6%	£2,845	£556	5.12
85	Anon ID: 17	3,588	2.8	3,128	8	1,564	0.6	2,024	43.6%	£2,845	£569	5.00
86	Anon ID: 18	3,588	1.4	1,600	4	800	0.3	2,788	22.3%	£1,423	£291	4.89

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
87	Anon ID: 19	3,588	1.4	1,524	4	762	0.3	2,826	21.2%	£1,423	£277	5.13
88	Anon ID: 20	3,588	4.2	3,720	12	1,860	0.7	1,728	51.8%	£4,268	£677	6.30
89	Shankill Road Library	25,844	9.8	9,328	28	4,664	1.7	21,180	18.0%	£9,958	£881	11.30
90	Fall Road Library	22,973	20.7	20,393	59	10,197	3.8	12,776	44.4%	£20,983	£1,927	10.89
91	Ormeau Road Library	23,942	31.9	31,493	91	15,747	5.8	8,195	65.8%	£32,364	£2,976	10.87
92	Belfast Central Library	175,478	35.4	30,164	101	15,082	5.6	160,396	8.6%	£35,920	£2,850	12.60
93	Woodstock Library	13,670	3.5	3,570	10	1,785	0.7	11,885	13.1%	£3,556	£337	10.54
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	262.2	244,749	749	122,375	45.4	278,043	30.6%	£266,377	£23,129	11.52
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	360.2	318,935	1,029	159,468	59.1	339,987	31.9%	£365,957	£30,139	12.14
Totals / Averages		21,598,484	6,844.6	6,243,198	19,556	3,121,599	1,157.8	18,476,885	14.5%	£6,954,969	£594,398	11.70

Scenario 8 (CBDM Results): 50% self-consumption, 0% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel . This scenario demonstrates the potential option for, and impact of, zero export agreements with the DNO and the impact of panel viability filtering.

Table 16: (CBDM) Scenario 8. 50% self-consumption, 0% export and installation of PV panels which generate a minimum of 188.17kWh/ year electricity per panel . This scenario demonstrates the potential option for, and impact of, zero export agreements with the DNO and the impact of panel viability filtering

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
1	Housing Centre	699,681	45.9	30,868	131	15,434	5.7	684,247	2.2%	£46,589	£2,917	15.97
2	The Plaza	257,526	119.0	78,483	340	39,242	14.6	218,285	15.2%	£120,919	£7,417	16.30
5	Causeway Exchange	431,155	48.7	28,099	139	14,050	5.2	417,106	3.3%	£49,434	£2,655	18.62
7	Adelaide House	576,450	87.9	57,858	251	28,929	10.7	547,521	5.0%	£89,267	£5,468	16.33
13	Belfast City Council	925,435	192.9	118,100	551	59,050	21.9	866,385	6.4%	£195,960	£11,160	17.56
14	Ulster Hall	248,217	115.2	79,967	329	39,984	14.8	208,234	16.1%	£117,007	£7,557	15.48
15	Cecil Ward	466,475	5.6	3,373	16	1,687	0.6	464,789	0.4%	£5,690	£319	17.85
16	St Georges Market	218,861	267.1	165,900	763	82,950	30.8	135,911	37.9%	£271,356	£15,678	17.31
17	Shankill Leisure Centre	401,128	199.5	136,083	570	68,042	25.2	333,087	17.0%	£202,717	£12,860	15.76
18	Grove Wellbeing Centre	783,600	702.5	479,345	2,007	239,673	88.9	543,928	30.6%	£713,777	£45,298	15.76
19	Duncrue Complex	958,477	566.0	396,188	1,617	198,094	73.5	760,383	20.7%	£575,076	£37,440	15.36
20	Ozone Leisure Centre	194,093	598.9	414,156	1,711	207,078	76.8	- 12,985	106.7%	£608,506	£39,138	15.55

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
21	GLL Connswater Gym, Unit 11 Connswater Shopping Centre	166,313	192.9	131,138	551	65,569	24.3	100,744	39.4%	£195,960	£12,393	15.81
22	Whiterock Leisure Centre	328,931	53.2	35,275	152	17,638	6.5	311,294	5.4%	£54,058	£3,333	16.22
23	Morton Community Centre	54,447	95.2	64,231	272	32,116	11.9	22,332	59.0%	£96,735	£6,070	15.94
25	Department for Communities Offices, James House	111,361	134.4	93,385	384	46,693	17.3	64,669	41.9%	£136,567	£8,825	15.48
27	National Museums Northern Ireland, Unit 12-21	382,828	482.3	338,329	1,378	169,165	62.7	213,664	44.2%	£490,077	£31,972	15.33
28	Public Records Office of Northern Ireland	963,163	205.5	134,349	587	67,175	24.9	895,989	7.0%	£208,763	£12,696	16.44
35	106-108 Hollywood Road	149,447	33.6	22,882	96	11,441	4.2	138,006	7.7%	£34,142	£2,162	15.79
43	Royal Victoria Hospital - New Maternity	989,645	154.0	97,667	440	48,834	18.1	940,812	4.9%	£156,483	£9,230	16.95
44	Royal Victoria Hospital - Kelvin	366,106	330.8	218,397	945	109,199	40.5	256,908	29.8%	£336,083	£20,639	16.28

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
47	Belfast City Hospital - Cancer Centre	4,409,518	199.9	133,674	571	66,837	24.8	4,342,681	1.5%	£203,073	£12,632	16.08
48	Belfast City Hospital - Multi Storey Car Park 2	-	454.0	297,534	1,297	148,767	55.2	- 148,767	No data	£461,270	£28,117	16.41
49	Belfast City Hospital - Multi Storey Car Park 1	-	483.4	328,617	1,381	164,309	60.9	- 164,309	No data	£491,144	£31,054	15.82
51	Mater Hospital - McAuley	1,133,827	280.7	197,744	802	98,872	36.7	1,034,955	8.7%	£285,226	£18,687	15.26
52	Mater Hospital - Dempsey	2,426,201	11.6	7,534	33	3,767	1.4	2,422,434	0.2%	£11,736	£712	16.48
53	Mater Hospital - Dorrian	522,942	52.2	32,882	149	16,441	6.1	506,501	3.1%	£52,991	£3,107	17.05
56	Belfast Metropolitan College (BMC) - Titanic Quarter	1,167,274	575.1	389,891	1,643	194,946	72.3	972,329	16.7%	£584,323	£36,845	15.86
58	Ulster Museum	1,031,844	232.8	156,482	665	78,241	29.0	953,603	7.6%	£236,503	£14,788	15.99
69	Anon ID: 1	3,588	2.1	1,579	6	790	0.3	2,799	22.0%	£2,134	£287	7.43
70	Anon ID: 2	3,588	2.8	2,117	8	1,059	0.4	2,530	29.5%	£2,845	£385	7.38
71	Anon ID: 3	3,588	2.8	2,168	8	1,084	0.4	2,504	30.2%	£2,845	£395	7.21
72	Anon ID: 4	3,588	2.1	1,326	6	663	0.2	2,925	18.5%	£2,134	£241	8.84
73	Anon ID: 5	3,588	2.5	1,854	7	927	0.3	2,661	25.8%	£2,490	£337	7.38

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
74	Anon ID: 6	3,588	2.5	1,856	7	928	0.3	2,660	25.9%	£2,490	£338	7.37
75	Anon ID: 7	3,588	2.8	2,212	8	1,106	0.4	2,482	30.8%	£2,845	£403	7.07
76	Anon ID: 8	3,588	2.8	2,219	8	1,110	0.4	2,479	30.9%	£2,845	£404	7.05
77	Anon ID: 9	3,588	2.1	1,644	6	822	0.3	2,766	22.9%	£2,134	£299	7.13
78	Anon ID: 10	3,588	2.8	2,115	8	1,058	0.4	2,531	29.5%	£2,845	£385	7.39
79	Anon ID: 11	3,588	2.8	2,108	8	1,054	0.4	2,534	29.4%	£2,845	£384	7.42
80	Anon ID: 12	3,588	2.8	2,108	8	1,054	0.4	2,534	29.4%	£2,845	£384	7.42
81	Anon ID: 13	3,588	2.8	2,117	8	1,059	0.4	2,530	29.5%	£2,845	£385	7.38
82	Anon ID: 14	3,588	2.8	2,130	8	1,065	0.4	2,523	29.7%	£2,845	£388	7.34
83	Anon ID: 15	3,588	2.8	2,118	8	1,059	0.4	2,529	29.5%	£2,845	£385	7.38
84	Anon ID: 16	3,588	2.8	2,195	8	1,098	0.4	2,491	30.6%	£2,845	£399	7.12
85	Anon ID: 17	3,588	2.8	2,189	8	1,095	0.4	2,494	30.5%	£2,845	£398	7.14
86	Anon ID: 18	3,588	1.4	1,105	4	553	0.2	3,036	15.4%	£1,423	£201	7.07
87	Anon ID: 19	3,588	1.4	1,098	4	549	0.2	3,039	15.3%	£1,423	£200	7.12
88	Anon ID: 20	3,588	4.2	3,135	12	1,568	0.6	2,021	43.7%	£4,268	£571	7.48
89	Shankill Road Library	25,844	17.5	11,505	50	5,753	2.1	20,091	22.3%	£17,782	£1,087	16.36

Property ID	Property Name	Existing Electricity Usage (kWh/year)	System Size (kW)	Estimated PV Generation (kWh/year)	No. of Panels	Electricity from PV Usage (kWh/year)	Carbon Emissions Savings (tonnesCO _{2e} year)	Difference Between Generation & Existing Usage (kWh/year)	Contribution to Existing Electricity Usage (%)	Estimated System Cost (£)	Estimated Financial Return (£/year)	Estimated Payback Period (years)
90	Fall Road Library	22,973	17.9	13,355	51	6,678	2.5	16,295	29.1%	£18,138	£1,262	14.37
91	Ormeau Road Library	23,942	32.2	22,504	92	11,252	4.2	12,690	47.0%	£32,719	£2,127	15.39
92	Belfast Central Library	175,478	45.9	30,363	131	15,182	5.6	160,296	8.7%	£46,589	£2,869	16.24
93	Woodstock Library	13,670	3.5	2,431	10	1,216	0.5	12,454	8.9%	£3,556	£230	15.48
94	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 1	400,418	301.4	206,668	861	103,334	38.3	297,084	25.8%	£306,209	£19,530	15.68
95	Belfast Metropolitan College (BMC) - 125-153 Millfield, Building 2	499,455	395.5	268,629	1,130	134,315	49.8	365,140	26.9%	£401,877	£25,385	15.83
Totals / Averages		21,598,484	7,785.4	5,263,279	22,244	2,631,640	976.1	18,966,844	12.2%	£7,910,940	£500,826	15.80