

DOMESTIC ENERGY CONSUMPTION AND CO ₂ ANALYSIS												SAP 2012 CO ₂ PERFORMANCE					SAP 10.0 CO ₂ PERFORMANCE					DEMAND					
Unit Identifier (e.g. plot number, dwelling type etc.)	Model total floor area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		REGULATED ENERGY CONSUMPTION PER UNIT (kWh p.a.) - TER WORKSHEET						REGULATED CO ₂ EMISSIONS PER UNIT (kgCO ₂ p.a.)					REGULATED CO ₂ EMISSIONS PER UNIT					Fabric Energy Efficiency (FEE)					
				Calculated TER 2012 (kgCO ₂ / m ²)	TER Worksheet TER 2012 (kgCO ₂ / m ²)	Space Heating	Fuel type Space Heating	Domestic Hot Water	Fuel type Domestic Hot Water	Lighting	Auxiliary	Cooling	Space Heating	Domestic Hot Water	Lighting	Auxiliary	Cooling	2012 CO ₂ emissions (kgCO ₂ p.a.)	Space Heating	Domestic Hot Water	Lighting		Auxiliary	Cooling	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	Calculated TER SAP 10.0 (kgCO ₂ / m ²)	Target Fabric Energy Efficiency (TFEE) (kWh/m ²)
TER Worksheet (Row 4)				TER Worksheet (Row 27)		TER Worksheet (Row 21)		TER Worksheet (Row 218)		TER Worksheet (Row 232)		TER Worksheet (Row 231)		N / A													
WHA ST A	38.65	4	154.6	17.9	17.9	809.19	Natural Gas	1750.79	Natural Gas	194.69	75					693	170	368	45	17			600	15.5	29.33		
WHA 1B2P A	55.07	7	385.49	18.0	18.0	1773.68	Natural Gas	2018.27	Natural Gas	252.49	75					999	372	424	59	17			873	15.8	41.65		
WHA 1B2PD A	66.33	2	132.66	16.5	16.5	1954.22	Natural Gas	2211.12	Natural Gas	300.1	75					1,094	410	464	70	17			962	14.5	39.31		
WHA 2B2P A	85.87	8	686.96	14.5	14.5	2252.3	Natural Gas	2460.84	Natural Gas	364.12	75					1,246	473	517	85	17			1,092	12.7	35.2		
WHA 2B2PD A	95.94	3	287.82	16.1	16.1	3508.72	Natural Gas	2911.12	Natural Gas	392.97	75					1,545	737	827	92	17			1,373	14.3	40.33		
WAT 1B2P A	50.07	7	350.49	16.9	16.9	1218.34	Natural Gas	1940	Natural Gas	239	75					845	256	407	56	17			736	14.7	32.81		
WAT 1B2P B	60.25	4	241	17.2	17.2	1860.45	Natural Gas	2110.44	Natural Gas	273.28	75					1,038	391	443	64	17			915	15.2	40.06		
WAT 2B2PD A	83.48	6	500.88	15.8	15.8	2642.38	Natural Gas	2426.61	Natural Gas	357.85	75					1,320	555	510	83	17			1,166	14.0	40.35		
WAT 2B2PD B	96.65	3	289.95	15.5	15.5	2282.13	Natural Gas	2319.59	Natural Gas	394.86	75					1,498	600	628	92	17			1,329	13.7	43.65		
WAT 3B5P A	113.6	1	113.6	14.1	14.1	3577.7	Natural Gas	2582.32	Natural Gas	438.2	75					1,597	751	542	102	17			1,413	12.4	39		
Sum	3,143	45	3,143	16.1	-	93,372	N/A	99,496	N/A	13,774	3,375	0				50,560	19,608	20,894	3,209	786	0			44,498	14.2	38.88	

NON-DOMESTIC ENERGY CONSUMPTION AND CO ₂ ANALYSIS												SAP 2012 CO ₂ PERFORMANCE					SAP 10.0 CO ₂ PERFORMANCE					DEMAND		
Building Use	Model Area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		REGULATED ENERGY CONSUMPTION BY END USE (kWh/m ² p.a.) TER - SOURCE: BRUKL OUTPUT						REGULATED ENERGY CONSUMPTION BY FUEL TYPE (kWh/m ² p.a.) TER - SOURCE: BRUKL.INP or SIM.CSV FILE			REGULATED ENERGY CONSUMPTION BY FUEL TYPE (kWh/m ² p.a.) - TER BRUKL			REGULATED CO ₂ EMISSIONS		Fabric Energy Efficiency (FEE)				
				Calculated TER 2012 (kgCO ₂ / m ²)	BRUKL TER 2012 (kgCO ₂ / m ²)	Space Heating (kWh/m ² p.a.)	Fuel type Space Heating	Domestic Hot Water (kWh/m ² p.a.)	Fuel type Domestic Hot Water	Lighting (kWh/m ² p.a.)	Auxiliary (kWh/m ² p.a.)	Cooling (kWh/m ² p.a.)	Natural Gas	Grid Electricity	Equipment	Natural Gas	Grid Electricity	Unregulated Grid Electricity	SAP10.0 CO ₂ emissions (kgCO ₂ p.a.)		BRUKL TER SAP10.0 (kgCO ₂ / m ²)			
Wharf Lane	1392	1	1392	35.2	35.2	1.94	Natural Gas	26.57	Natural Gas	21.53	24.34	11.54	0.216 kgCO ₂ /kWh	0.519 kgCO ₂ /kWh	0.519 kgCO ₂ /kWh	0.210 kgCO ₂ /kWh	0.233 kgCO ₂ /kWh	0.233 kgCO ₂ /kWh				26,490	19.0	
Water Lane	882.2	1	882.2	46.7	46.7	6.92	Natural Gas	40.8	Natural Gas	40.98	21.7	9.32	48	70	61.78	48	70	62				23,270	26.4	
Sum	2,274	2	2,274	39.7	-	8,805	N/A	72,979	N/A	66,122	53,025	24,286	81,777	139,855	229,918	81,777	139,855	229,918	N/A	N/A		49,759	21.9	

SITE-WIDE ENERGY CONSUMPTION AND CO ₂ ANALYSIS												SAP 2012 CO ₂ PERFORMANCE					SAP 10.0 CO ₂ PERFORMANCE					DEMAND		
Use	Total Area (m ²)	Calculated TER 2012 (kgCO ₂ / m ²)	-	REGULATED ENERGY CONSUMPTION						REGULATED CO ₂ EMISSIONS PER UNIT					Fabric Energy Efficiency (FEE)									
				Space Heating (kWh p.a.)	N/A	Domestic Hot Water (kWh p.a.)	N/A	Lighting (kWh p.a.)	Auxiliary (kWh p.a.)	Cooling (kWh p.a.)	2012 CO ₂ emissions (kgCO ₂ p.a.)	Space Heating	Domestic Hot Water	Lighting		Auxiliary	Cooling	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	Calculated TER SAP 10.0 (kgCO ₂ / m ²)					
Sum	5,418	26.0	-	102,177	N/A	172,475	N/A	79,897	56,400	24,286				140,869								44,257	17.4	

The applicant should complete all the light blue cells including information on the 'be lean' energy consumption figures, the 'be lean' DER, the DFEE and the regulated energy demand of the 'be lean' scenario.

SAP 2012 CO₂ PERFORMANCE

SAP 10.0 CO₂ PERFORMANCE

FEES

DOMESTIC ENERGY CONSUMPTION AND CO₂ ANALYSIS

Unit Identifier (e.g. plot number, dwelling type etc.)	Model total floor area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		REGULATED ENERGY CONSUMPTION PER UNIT (kWh p.a.) - 'BE LEAN' SAP DER WORKSHEET										REGULATED CO ₂ EMISSIONS PER UNIT (kgCO ₂ p.a.)					REGULATED CO ₂ EMISSIONS PER UNIT					Fabric Energy Efficiency (FEE)				
				Calculated DER 2012 (kgCO ₂ / m ²)	DER Worksheet DER 2012 (kgCO ₂ / m ²)	Space Heating	Fuel type Space Heating	Domestic Hot Water (Heat Source 1)	Fuel type Domestic Hot Water	Secondary Heating system	Fuel type Space Heating	Lighting	Auxiliary	Cooling	Space Heating CO ₂ emissions (kgCO ₂ p.a.)	Domestic Hot Water CO ₂ emissions (kgCO ₂ p.a.)	Lighting CO ₂ emissions (kgCO ₂ p.a.)	Auxiliary CO ₂ emissions (kgCO ₂ p.a.)	Cooling CO ₂ emissions (kgCO ₂ p.a.)	2012 CO ₂ emissions (kgCO ₂ p.a.)	Space Heating CO ₂ emissions (kgCO ₂ p.a.)	Domestic Hot Water CO ₂ emissions (kgCO ₂ p.a.)	Lighting CO ₂ emissions (kgCO ₂ p.a.)	Auxiliary CO ₂ emissions (kgCO ₂ p.a.)	Cooling CO ₂ emissions (kgCO ₂ p.a.)		Unregulated (kgCO ₂ p.a.)	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	Calculated DER SAP 10.0 (kgCO ₂ / m ²)	
																														DER Sheet (Row 304)
WHA ST A	38.65	4	154.6	13.3	13.3	153.67	Natural Gas	2512.39	Natural Gas			187.1	309.69						913	32	317	44	26	350	418	10.8	33.46			
WHA 1B2P A	55.07	7	385.49	16.0	16.0	1348.23	Natural Gas	1763.16	Natural Gas			252.49	145.73						879	283	370	59	34	465	746	13.5	41.47			
WHA 1B2PD A	68.33	2	132.66	13.7	13.7	1154.42	Natural Gas	1932.22	Natural Gas			296.91	169.39						909	242	406	69	39	542	737	11.4	36.1			
WHA 2B2P A	55.87	8	686.96	13.4	13.4	1751.03	Natural Gas	2157.68	Natural Gas			364.12	234.28						1,149	364	451	85	55	658	955	11.1	36.15			
WHA 2B2PD A	95.94	3	287.82	15.6	15.6	1221.1	Natural Gas	2212.06	Natural Gas			392.97	231.61						1,488	676	466	92	54	707	1,287	13.4	49.56			
WAT 1B2P A	50.07	7	350.49	12.9	12.9	417.11	Natural Gas	1684	Natural Gas			232.16	135.22						645	88	354	54	32	430	627	10.5	27.08			
WAT 1B2P B	60.25	4	241	12.2	12.2	2130.37	Natural Gas	1842.43	Natural Gas			23.2	156.61						736	237	387	5	36	501	666	11.1	37.18			
WAT 2B2P A	83.48	6	600.88	13.1	13.1	1593.41	Natural Gas	2228.36	Natural Gas			356.7	205.43						1,096	335	447	83	48	645	913	10.9	38.87			
WAT 2B2PD B	96.65	3	289.95	14.2	14.2	2548.18	Natural Gas	2215.17	Natural Gas			394.86	259.93						1,369	535	466	92	61	711	1,153	11.9	42.54			
WAT 3B2P A	113.6	1	113.6	11.4	11.4	1968.11	Natural Gas	2274.59	Natural Gas			435.53	300.25						1,298	413	478	101	70	789	1,062	9.4	34.87			
Sum	3,143	45	3,143	13.7	-	62,503	N/A	86,920	N/A	0	N/A	12,680	8,262	0	N/A	13,501	18,776	6,581	4,283	0	43,139	13,126	18,263	2,954	1,923	0	24,919	36,256	11.5	37.13

NON-DOMESTIC ENERGY CONSUMPTION AND CO₂ ANALYSIS

Building Use	Model Area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		REGULATED ENERGY CONSUMPTION BY END USE (kWh/m ² p.a.) 'BE LEAN' BER - SOURCE: BRUKL OUTPUT						REGULATED ENERGY CONSUMPTION BY FUEL TYPE (kWh/m ² p.a.) 'BE LEAN' BER - SOURCE: BRUKL INP or 'BM.CSV FILE						REGULATED CO ₂ EMISSIONS PER UNIT					Fabric Energy Efficiency (FEE)	
				Calculated BER 2012 (kgCO ₂ / m ²)	BRUKL BER 2012 (kgCO ₂ / m ²)	Space Heating (kWh/m ² p.a.)	Fuel type Space Heating	Domestic Hot Water (kWh/m ² p.a.)	Fuel type Domestic Hot Water	Lighting (kWh/m ² p.a.)	Auxiliary (kWh/m ² p.a.)	Cooling (kWh/m ² p.a.)	Natural Gas	Grid Electricity	Equipment	2012 CO ₂ emissions (kgCO ₂ p.a.)	Natural Gas	Grid Electricity	Equipment	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	BRUKL BER SAP 10.0 (kgCO ₂ / m ²)			
																						0.216 kgCO ₂ /kWh		0.519 kgCO ₂ /kWh
Wharf Lane	1392	1	1392	30.8	30.8	3.72	Natural Gas	26.57	Natural Gas			11.57	24.19	11.37	30	47	126	42,819	30	47	126	23,989	17.2	N/A
Water Lane	682.2	1	682.2	38.1	38.1	7.53	Natural Gas	40.8	Natural Gas			22.91	21.88	8.97	48	53	61.76	33,576	48	53	62	19,893	22.5	N/A
Sum	2,274	2	2,274	33.6	-	11,821	N/A	72,979	N/A	N/A	N/A	36,317	52,975	23,740	84,799	111,906	229,916	76,396	84,799	111,906	229,916	43,882	19.3	N/A

SITE-WIDE ENERGY CONSUMPTION AND CO₂ ANALYSIS

Use	Total Area (m ²)	Calculated BER 2012 (kgCO ₂ / m ²)	-	REGULATED ENERGY CONSUMPTION								REGULATED CO ₂ EMISSIONS	REGULATED CO ₂ EMISSIONS		Fabric Energy Efficiency (FEE)	
				Space Heating (kWh p.a.)	N/A	Domestic Hot Water (kWh p.a.)	N/A	Secondary Heating System (kWh p.a.)	N/A	Lighting (kWh p.a.)	Auxiliary (kWh p.a.)		Cooling (kWh p.a.)	2012 CO ₂ emissions (kgCO ₂ p.a.)		SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)
Sum	5,418	22.1	-	74,324	N/A	199,900	N/A	0	N/A	48,996	61,227	23,740	179,535	80,130	14.8	N/A

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The applicant should complete all the light blue cells including information on the 'be clean' energy consumption figures and the 'be clean' DER.

SAP 2012 CO₂ PERFORMANCE

SAP 10.0 CO₂ PERFORMANCE

DOMESTIC ENERGY CONSUMPTION AND CO ₂ ANALYSIS												REGULATED ENERGY CONSUMPTION PER UNIT (kWh p.a.) - 'BE CLEAN' SAP DER WORKSHEET						REGULATED CO ₂ EMISSIONS PER UNIT (kgCO ₂ p.a.)						REGULATED CO ₂ EMISSIONS PER UNIT (kgCO ₂ p.a.)										
Unit Identifier (e.g. plot number, dwelling type etc.)	Model total floor area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		Space Heating (Heat Source 1)	Fuel type Space Heating	Domestic Hot Water (Heat Source 1)	Fuel type Domestic Hot Water	Space and Domestic Hot Water from CHP	Fuel type CHP	Total Electricity generated by CHP (-)	Secondary Heating system	Fuel type Secondary Heating	Lighting	Auxiliary	Cooling	Space Heating	Domestic Hot Water	Space Heating and DHW from CHP	Electricity generated by CHP	Lighting	Auxiliary	Cooling	2012 CO ₂ emissions (kgCO ₂ p.a.)	Space Heating	Domestic Hot Water	Space Heating and DHW from CHP	Electricity generated by CHP	Lighting	Auxiliary	Cooling	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	Calculated DER SAP 10.0 (kgCO ₂ / m ²)
				Calculated DER 2012 (kgCO ₂ / m ²)	DER Worksheet DER 2012 (kgCO ₂ / m ²)																													
WHA ST A	38.65	4	154.6	13.3	13.3	131.47	Natural Gas	1511.29	Natural Gas					187.1	109.69	0	33	326			97	57	0	513	32	317			44	26	0	418	10.8	
WHA 1B2P A	55.07	7	385.49	16.0	16.0	1348.23	Natural Gas	1763.16	Natural Gas					252.49	145.73	0	291	591			131	76	0	879	263	370			59	34	0	746	13.5	
WHA 1B2PD A	68.33	2	132.66	13.7	13.7	1154.42	Natural Gas	1932.22	Natural Gas					296.92	169.99	0	249	417			154	88	0	909	242	406			69	39	0	787	11.4	
WHA 2B2P A	85.87	8	686.96	13.4	13.4	1734.03	Natural Gas	2147.48	Natural Gas					364.12	234.28	0	375	464			189	122	0	1,149	364	451			85	55	0	955	11.1	
WHA 2B2PD A	95.94	3	287.82	15.6	15.6	3221.3	Natural Gas	2212.06	Natural Gas					392.97	231.61	0	696	478			204	120	0	1,498	676	465			92	54	0	1,287	13.4	
WAT 1B2P A	50.07	7	350.49	12.9	12.9	427.11	Natural Gas	1684	Natural Gas					232.16	135.22	0	90	364			120	70	0	645	88	354			54	32	0	627	10.5	
WAT 1B2P B	60.25	4	241	12.2	12.2	1130.17	Natural Gas	1843.43	Natural Gas					23.2	156.62	0	244	398			12	81	0	736	237	387			5	36	0	666	11.1	
WAT 2B2PD A	83.48	6	500.88	13.1	13.1	1593.41	Natural Gas	2128.26	Natural Gas					356.7	205.43	0	344	460			185	107	0	1,096	335	447			83	48	0	913	10.9	
WAT 2B2PD B	96.65	3	289.95	14.2	14.2	2548.18	Natural Gas	2215.57	Natural Gas					394.86	259.93	0	550	479			205	135	0	1,369	535	465			92	61	0	1,153	11.9	
WAT 3B2P A	113.6	1	113.6	11.4	11.4	1968.11	Natural Gas	2274.59	Natural Gas					435.53	300.25	0	425	491			226	156	0	1,298	413	478			101	70	0	1,062	9.4	
Sum	3,143	45	3,143	13.7	-	62,503	N/A	86,920	N/A	0	N/A	0	0	12,680	8,252	0	13,801	18,775	0	0	6,561	4,283	0	43,739	13,126	18,253	0	0	2,954	1,923	0	36,256	11.5	

NON-DOMESTIC ENERGY CONSUMPTION AND CO ₂ ANALYSIS												REGULATED ENERGY CONSUMPTION BY END USE (kWh/m ² p.a.) 'BE CLEAN' BER - SOURCE: BRUKL OUTPUT						REGULATED ENERGY CONSUMPTION BY FUEL TYPE (kWh/m ² p.a.) 'BE CLEAN' BER - SOURCE: BRUKL/INP or 'SIM CSV FILE						REGULATED CO ₂ EMISSIONS PER UNIT					
Building Use	Model Area (m ²)	Number of units	Total area represented by model (m ²)	VALIDATION CHECK		Space Heating (kWh/m ² p.a.)	Fuel type Space Heating	Domestic Hot Water (kWh/m ² p.a.)	Fuel type Domestic Hot Water	Electricity generated by CHP (-)	Secondary Heating System (kWh/m ² p.a.)	Lighting (kWh/m ² p.a.)	Auxiliary (kWh/m ² p.a.)	Cooling (kWh/m ² p.a.)	Natural Gas	Grid Electricity	Bespoke DH Factor	Electricity generated by CHP (-)	Equipment	2012 CO ₂ emissions (kgCO ₂ p.a.)	Natural Gas	Grid Electricity	Bespoke DH Factor	Electricity generated by CHP (-)	Equipment	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	BRUKL BER SAP 10.0 (kgCO ₂ / m ²)		
				Calculated BER 2012 (kgCO ₂ / m ²)	BRUKL BER 2012 (kgCO ₂ / m ²)																							Electricity generated by CHP (-)	Electricity generated by CHP (-)
Wharf Lane	1392	1	1392	30.8	30.8	3.72	Natural Gas	26.57	Natural Gas					11.57	24.19	11.37	30	47	126	42,819	30	47	0.000	0.233	126	23,989	17.2		
Water Lane	882.2	1	882.2	38.1	38.1	7.53	Natural Gas	40.8	Natural Gas					22.91	21.88	8.97	48	53	61.76	33,576	48	53	0.000	0.233	62	19,895	22.5		
Sum	2,274	2	2,274	33.6	-	11,821	N/A	72,979	N/A	0	N/A	N/A	N/A	36,317	62,975	23,740	84,799	111,906	229,918	76,396	84,799	111,906	0	0	229,918	43,882	19.3		

SITE-WIDE ENERGY CONSUMPTION AND CO ₂ ANALYSIS												REGULATED ENERGY CONSUMPTION						REGULATED CO ₂ EMISSIONS					
Use	Total Area (m ²)	Calculated BER 2012 (kgCO ₂ / m ²)	-	Space Heating (kWh p.a.)	N/A	Domestic Hot Water (kWh p.a.)	N/A	Space and Domestic Hot Water from CHP (kWh p.a.)	N/A	Electricity generated by CHP (kWh p.a.)	Secondary Heating System (kWh p.a.)	N/A	Lighting (kWh p.a.)	Auxiliary (kWh p.a.)	Cooling (kWh p.a.)	2012 CO ₂ emissions (kgCO ₂ p.a.)	-	SAP 10.0 CO ₂ emissions (kgCO ₂ p.a.)	Calculated BER SAP 10.0 (kgCO ₂ / m ²)				
																				0	0	0	0
Sum	5,418	22.1	-	74,324	N/A	189,900	N/A	0	N/A	0	0	N/A	48,996	61,227	23,740	118,535	-	80,138	14.8				

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SAP 2012 Performance

SAP 10.0 Performance

Domestic

Table 1: Carbon Dioxide Emissions after each stage of the Energy Hierarchy for domestic buildings

	Carbon Dioxide Emissions for domestic buildings (Tonnes CO ₂ per annum)	
	Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	50.6	62.7
After energy demand reduction (be lean)	43.1	62.7
After heat network connection (be clean)	43.1	62.7
After renewable energy (be green)	35.7	62.7

Table 2: Regulated Carbon Dioxide savings from each stage of the Energy Hierarchy for domestic buildings

	Regulated domestic carbon dioxide savings	
	(Tonnes CO ₂ per annum)	(%)
Be lean: savings from energy demand reduction	7.4	15%
Be clean: savings from heat network	0.0	0%
Be green: savings from renewable energy	7.5	15%
Cumulative on site savings	14.9	29%
Annual savings from off-set payment	35.7	-
(Tonnes CO ₂)		
Cumulative savings for off-set payment	1,070	-
Cash in-lieu contribution (£)	101,603	

*carbon price is based on GLA recommended price of £95 per tonne of carbon dioxide unless Local Planning Authority price is inputted in the 'Development Information' tab

Non-domestic

Table 3: Carbon Dioxide Emissions after each stage of the Energy Hierarchy for non-domestic buildings

	Carbon Dioxide Emissions for non-domestic buildings (Tonnes CO ₂ per annum)	
	Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	90.2	102.3
After energy demand reduction (be lean)	76.4	102.3

Table 1: Carbon Dioxide Emissions after each stage of the Energy Hierarchy for domestic buildings

	Carbon Dioxide Emissions for domestic buildings (Tonnes CO ₂ per annum)	
	Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	44.5	28.2
After energy demand reduction (be lean)	36.3	28.2
After heat network connection (be clean)	36.3	28.2
After renewable energy (be green)	16.0	28.2

Table 2: Regulated Carbon Dioxide savings from each stage of the Energy Hierarchy for domestic buildings

	Regulated domestic carbon dioxide savings	
	(Tonnes CO ₂ per annum)	(%)
Be lean: Savings from energy demand reduction	8.2	19%
Be clean: Savings from heat network	0.0	0%
Be green: Savings from renewable energy	20.3	46%
Cumulative on site savings	28.5	64%
Annual savings from off-set payment	16.0	-
(Tonnes CO ₂)		
Cumulative savings for off-set payment	480	-
Cash in-lieu contribution (£)	45,614	

*carbon price is based on GLA recommended price of £95 per tonne of carbon dioxide unless Local Planning Authority price is inputted in the 'Development Information' tab

Table 3: Carbon Dioxide Emissions after each stage of the Energy Hierarchy for non-domestic buildings

	Carbon Dioxide Emissions for non-domestic buildings (Tonnes CO ₂ per annum)	
	Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	49.8	45.9
After energy demand reduction (be lean)	43.9	45.9

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After heat network connection (be clean)	76.4	102.3
After renewable energy (be green)	61.2	102.3

Table 4: Regulated Carbon Dioxide savings from each stage of the Energy Hierarchy for non-domestic buildings

	Regulated non-domestic carbon dioxide savings	
	(Tonnes CO ₂ per annum)	(%)
Be lean: savings from energy demand reduction	13.9	15%
Be clean: savings from heat network	0.0	0%
Be green: savings from renewable energy	15.2	17%
Total Cumulative Savings	29.1	32%
Annual savings from off-set payment	61.2	-
(Tonnes CO ₂)		
Cumulative savings for off-set payment	1,835	-
Cash in-lieu contribution (£)	174,362	

*carbon price is based on GLA recommended price of £95 per tonne of carbon dioxide unless Local Planning Authority price is inputted in the 'Development Information' tab

After heat network connection (be clean)	43.9	45.9
After renewable energy (be green)	27.5	45.9

Table 4: Regulated Carbon Dioxide savings from each stage of the Energy Hierarchy for non-domestic buildings

	Regulated non-domestic carbon dioxide savings	
	(Tonnes CO ₂ per annum)	(%)
Be lean: savings from energy demand reduction	5.9	12%
Be clean: savings from heat network	0.0	0%
Be green: savings from renewable energy	16.4	33%
Total Cumulative Savings	22.3	45%
Annual savings from off-set payment	27.5	-
(Tonnes CO ₂)		
Cumulative savings for off-set payment	824	-
Cash in-lieu contribution (£)*	78,278	

*carbon price is based on GLA recommended price of £95 per tonne of carbon dioxide unless Local Planning Authority price is inputted in the 'Development Information' tab

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	Total regulated emissions (Tonnes CO ₂ / year)	CO ₂ savings (Tonnes CO ₂ / year)	Percentage savings (%)
Part L 2013 baseline	140.8		
Be lean	119.5	21.3	15%
Be clean	119.5	0.0	0%
Be green	96.8	22.7	16%
Total Savings	-	44.0	31%
	-	CO₂ savings off-set (Tonnes CO₂)	-
Off-set	-	2,904.9	-

	Total regulated emissions (Tonnes CO ₂ / year)	CO ₂ savings (Tonnes CO ₂ / year)	Percentage savings (%)
Part L 2013 baseline	94.3		
Be lean	80.1	14.1	15%
Be clean	80.1	0.0	0%
Be green	43.5	36.7	39%
Total Savings	-	50.8	54%
	-	CO₂ savings off-set (Tonnes CO₂)	-
Off-set	-	1,304.1	-

	Target Fabric Energy Efficiency (kWh/m ²)	Dwelling Fabric Energy Efficiency (kWh/m ²)	Improvement (%)
Development total	38.68	37.13	4%

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	Area weighted non-domestic cooling demand (MJ/m ²)	Total area weighted non-domestic cooling demand (MJ/year)
Actual		
Notional		

