

SEGRO @ 35% CO2 reduction (submitted scheme) + Barrett

	Carbon dioxide emissions for non-domestic buildings (Tonnes CO2 per annum)		
		Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	A	668.15	131.98
After energy demand reduction	B	471.80	131.98
After heat network / CHP	C	458.16	131.98
After renewable energy	D	438.03	131.98

	Regulated non-domestic carbon dioxide savings			
		(Tonnes CO2 per annum)	(%)	
Savings from energy demand reduction	A - B	196.35	$(A - B)/A \times 100$	29.39%
Savings from heat network / CHP	B - C	13.64	$(B - C)/A \times 100$	2.04%
Savings from renewable energy	C - D	20.13	$(C - D)/A \times 100$	3.01%
Total Cumulative Savings	A - D = E	230.12	$(A - D)/A \times 100$	34.44%

	Annual Shortfall (Tonnes CO2)	Cumulative Shortfall (Tonnes CO2)		
Total Target Savings	$A \times 0.35 = F$	233.85	-	
Shortfall / Surplus	$F - E = G$	3.73	$G \times 30$	111.975

	Carbon dioxide emissions for domestic buildings (Tonnes CO2 per annum)		
		Regulated	Unregulated
Baseline: Part L 2013 of the Building Regulations Compliant Development	A	1395.86	1662.23
After energy demand reduction	B	1353.76	1662.23
After heat network / CHP	C	1031.52	1662.23
After renewable energy	D	882.44	1662.23

	Regulated domestic carbon dioxide savings			
		(Tonnes CO2 per annum)	(%)	
Savings from energy demand reduction	A - B	42.10	$(A - B)/A \times 100$	3.02%
Savings from heat network / CHP	B - C	322.24	$(B - C)/A \times 100$	23.09%
Savings from renewable energy	C - D	149.08	$(C - D)/A \times 100$	10.68%
Cumulative on site savings	A - D = E	513.42	$(A - D)/A \times 100$	36.78%
Annual Savings from off-set payment	$-A - E = F$	882.44	-	
Cumulative savings for off-set payment	$F \times 30 \text{ years} = G$	26473.20	-	

	Total regulated emissions (Tonnes CO2/year)		CO2 savings (Tonnes CO2/year)		Percentage savings (%)	
	Part L 2013 baseline	A dom + A non dom	2064.01	-	-	-
Be lean	B dom + B non dom	1825.56	total A - total B	238.45	(total A - total B)/total A x 100	11.55%
Be clean	C dom + C non dom	1489.68	total B - total C	335.88	(total B - total C)/total A x 100	16.27%
Be green	D dom + D non dom	1320.47	total C - total D	169.21	(total C - total D)/total A x 100	8.20%
			CO2 savings off-set (Tonnes CO2)			
Off - set			G dom + H non dom	26585.18		

offset paymet (at £60/tonne) £1,595,111