

NTC Energy Savings Options from Bulk Lamp Change

Appendix C

Lighting Times Per Annum	Burning Hrs	Residential Lights for Bulk Lamp Change	10773
Trimable hours	237		
High Power (dusk - midnight / 05:30 Dawn)	2131		
Dimmed from 00.00 to 05.30	1773		
Total burning hours per annum	4141		

Lamp type & nominal wattages	Circuit Load (w)
Existing 150w SONt Comfort	180
New 100w GE streetwise - Full power	98
New 100w GE streetwise - Dimmed to 75% level	74
New 100w GE streetwise - Dimmed to 60% level	60

Base Position	Trimable hrs Kwh	High hrs Kwh	Dimable hrs Kwh	Total Kwh	Tonnes CO ₂
Existing 150w SONt Comfort - Full Power all night	459,576	4,132,307	3,438,095	8,029,979	4,312.10

Options for running new 100w Streetwise	Trimable hrs Kwh	High hrs Kwh	Dimable hrs Kwh	Total Kwh	Tonnes CO ₂	Saved Kwh	Saved tCO ₂
A: Full power all night	250,214	2,249,812	1,871,852	4,371,877	2,347.70	3,658,101	1,964.40
B: Full power (A) and trimmed	-	2,249,812	1,871,852	4,121,664	2,213.33	3,908,315	2,098.77
C: Dimmed to 75% level (midnight - 5.30)	250,214	2,249,812	1,413,439	3,913,465	2,101.53	4,116,514	2,210.57
D: Dimmed to 60% level (midnight - 5.30)	250,214	2,249,812	1,146,032	3,646,057	1,957.93	4,383,922	2,354.17
E: Dimmed to 75% level all night	188,937	1,698,837	1,413,439	3,301,213	1,772.75	4,728,765	2,539.35
F: Dimmed to 75% level and then 60% (00:00 - 5.30)	188,937	1,698,837	1,146,032	3,033,806	1,629.15	4,996,173	2,682.94
G: Option C + Trimming	-	2,249,812	1,413,439	3,663,251	1,967.17	4,366,728	2,344.93
H: Option D + Trimming	-	2,249,812	1,146,032	3,395,844	1,823.57	4,634,135	2,488.53
I: Option E + Trimming	-	1,698,837	1,413,439	3,112,277	1,671.29	4,917,702	2,640.81
J: Option F plus Trimming	-	1,698,837	1,146,032	2,844,869	1,527.69	5,185,110	2,784.40

Net Saving to NTC after SSEC funding costs and their share:-

	10p per kwh	Extra over A
A: Full power all night	£ 127,406	£ -
B: Full power (A) and trimmed	£ 139,930	£ 12,523
C: Dimmed to 75% level (midnight - 5.30)	£ 150,350	£ 22,944
D: Dimmed to 60% level (midnight - 5.30)	£ 163,734	£ 36,327
E: Dimmed to 75% level all night	£ 180,993	£ 53,587
F: Dimmed to 75% level and then 60% (00:00 - 5.30)	£ 194,377	£ 66,970
G: Option C + Trimming	£ 162,873	£ 35,467
H: Option D + Trimming	£ 176,257	£ 48,850
I: Option E + Trimming	£ 190,449	£ 63,043
J: Option F plus Trimming	£ 203,833	£ 76,427