

Appendix B		Energy Saving Options Assessment		
Option	Political	Economical	Social	Technical
Switch off lighting (proposed or some traffic routes)	Saves energy and carbon but removes a street lighting service in total. Could be a negative reaction from residents close to the routes and a positive reaction from the dark sky supporters.	Total energy saving, very quick return on investment, lower lamp wattages means lower per-unit energy savings	Creates a dark environment in urban areas which will be uncomfortable and could risk increased crime / accidents etc.	Simple and instant. Can be reverted at minimal cost in the short term. Equipment will quickly deteriorate if not operated. Risk of accident rate increasing.
Remove Lighting (proposed or some traffic routes)	Removes asset and any future liability / costs for maintenance and or replacement. Unlikely to be acceptable in most areas.	Higher costs than switch off or part night lighting. In the longer term this will bring the biggest savings.	Creates a dark environment in urban areas which will be uncomfortable and could risk increased crime / accidents etc.	Could only be reverted at significant cost. Risk of accident rate increasing.
Part-night lighting (proposed for residential)	Saves energy and reduces carbon. Could be a backlash from residents.	High savings in carbon and energy achieved for low investment.	Lighting only operated part night when there is low footfall and exemptions account for high risk areas where lighting will be replaced with white light subject to affordability.	Simple exchange of photo-cells, quick implementation, effective use of capital impacts across larger area. Can be reverted at same cost. BS standard not impacted as lighting either off or on.
White light lantern swap using fluorescent and or LED (proposed for some residential and key traffic route junctions)	Saves energy and reduces carbon. White light will provide the perception of improved lighting.	Greater capital investment per unit so can only be used within affordable limits. Will provide maintenance savings.	Public perceive an improvement so may be a win win if used in more deprived / higher crime areas etc.	Straightforward luminaire swap. Can also incorporate part night and/or trimming. Reduction in light levels but lighting is a white light
Re-lamping existing SON lanterns with white light Streetwise CMH (applicable to residential and traffic routes)	Saves energy and reduces carbon. White light will provide the perception of improved lighting.	Less cost than new lanterns and will provide maintenance savings.	Public perceive an improvement	Can only be implemented on certain luminaires, detailed investigations of existing equipment required.
Dimming (proposed for urban traffic routes and town centres)	Saves energy and reduces carbon. Unlikely to be noticeable to residents.	Long return on investment due to relatively high capital costs and limited savings compared to part night.	Very little impact	CMS with compatible gear or new gear and local dimming controls
Trimming (all lighting)	Very little impact	Reasonable return on investment	very little impact	Simple exchange of photo-cells, quick implementation, can be incorporated with part-night cells.