



## LIGHTING PROPOSAL

When you touch a Incandescent (Standard) light bulb you are most likely to burn your fingers. This is because 80% of the electrical energy used by this bulb is converted into heat with only 20% being turned into visible light. We would all agree, this is not an ideal solution. Energy savers have the exact opposite ratio. 80% to Light and only 20% to heat. Not only is this obviously a better equation, but it also has the added benefit that the heat emitted does not have to be counteracted with Air conditioning units or other.

Previously we have shied away from these types of bulbs due to the lack of colour warmth (blue white light) and that flickering light feeling.

The new generation of Energy saver lamps (Phillips) now produce both a warm light, equivalent to that of the old style globes (2700K) and a working white light (6500K) with a non discernable flicker and a working life of up to 10 times that of a incandescent lamp.

For exposed light globe applications it may be seen in our “Bulb Specification” sheet (Appendix) that new innovations such as encased reflector and soft tone globes are also available.

Tabled below are some application examples. Showing the consumption and cost savings.

### Energy Saver Replacement Bulb Calculation

Type	Bulbs	Original Lighting		Smart Lighting		Rp	%age
		Usage i	Total i	Usage ii	Total ii	Saving	Saving
Mid Size villa	70	1,476	1,084,860	301	220,941	863,919	79.63%
Mid Size Hotel	400	8,280	6,085,800	1,602	1,177,470	4,908,330	80.65%
Large Size Hotel	1,375	25,830	18,985,050	4,446	3,267,810	15,717,240	82.79%

Type	Instal Cost Rp	Mthly Saving Rp	Return On Invest
Mid Size villa	3,175,000	863,919	3.68 Months
Mid Size Hotel	14,500,000	4,908,330	2.95 Months
Large Size Hotel	40,750,000	15,717,240	2.59 Months

Note . The above calculations are based on a 75% usage at the lower Tariff (Rp 520 per KWH) and 25% at the upper Tariff (Rp 1380 per KWH) A detailed Breakdown, including Average energy saver bulb costs are shown in appendices.