

Why Change The Yellow Lightbulbs?

The City Has No Money – so electricity saving measures have to be implemented.

Changing the lightbulbs will benefit us in the long run!

What we save on electricity, we can use for many other projects!!

HERE ARE THE FIGURES:

COMPUTATION OF ELECTRICAL CONSUMPTION OF HIGH PRESSURE (HPS) LAMP (Assuming a CAPELCO rate of P 9.23/ Kw-Hrs/day and 90% Demand Factor)

1. ROXAS AVENUE

(YELLOW LIGHT)

$$\begin{aligned} \text{A. } &= 56 \times 250 \text{ W} \times 12 \text{ Hrs} \times 0.9 \\ &= 151,200 \text{ W-Hr} / 1000 \text{ Kw/W} \\ &= 151.2 \text{ Kw} \times \text{P } 9.23 / \text{ Kw-Hr} \\ &= \text{P } 1,395.6 \times 31 \text{ days} \\ &= \text{P } 43,262.8 / \text{Month} \end{aligned}$$



THE YELLOW LIGHT BULBS

(WHITE LIGHT)

$$\begin{aligned} \text{B. If replaced by SL Lamp (105 W)} \\ &= 56 \times 105 \text{ W} \times 12 \text{ Hrs.} \times 0.9 \\ &= 63,505 \text{ W-Hr} / 1000 \text{ Kw/W} \\ &= 63.5 \text{ Kw} \times \text{P } 9.23 / \text{ Kw-Hr} \\ &= \text{P } 586.1 \times 31 \text{ days} \\ &= \text{P } 18,170.4 / \text{Month} \end{aligned}$$



THE WHITE LIGHT BULBS

Approximate savings per Month = P 43,262.8 – P 18,170.4

= P 25,092.4 **Savings of the City per Month**

2. ARNALDO BOULEVARD

(YELLOW LIGHT)

$$\begin{aligned} \text{A. } &= 154 \times 150 \text{ W} \times 12 \text{ Hrs} \times 0.9 \\ &= 249,480 \text{ W-Hr} / 1000 \text{ Kw/W} \\ &= 249.5 \text{ Kw} \times \text{P } 9.23 / \text{ Kw-Hr} \\ &= \text{P } 2,302.7 \times 31 \text{ days} \\ &= \text{P } 71,383.7 / \text{Month} \end{aligned}$$



THE YELLOW LIGHT BULBS

B. If replaced by SL Lamp (55 W)

(WHITE LIGHT)

$$\begin{aligned} &= 154 \times 55 \text{ W} \times 12 \text{ Hrs} \times 0.9 \\ &= 91.5 \text{ Kw} \times \text{P } 9.23 / \text{ Kw - Hr} \\ &= \text{P } 844.3 \times 31 \text{ days} \\ &= \text{P } 26,174 / \text{Month} \end{aligned}$$



THE WHITE LIGHT BULBS

Approximate savings per Month = P 71,383.7 – P 26,174

= P 45,209.7 **Savings of the City per Month**

UNIT COST OF HPS LAMPS AND SL (DAY LIGHT) LAMPS

1. HPS Lamps

(COST OF YELLOW LIGHT)

$$\begin{aligned} \text{1 Set HPS lamp (250 W)} &= \text{P } 1,765 \\ \text{1 Set HPS lamp (150 W)} &= \text{P } 1,388 \\ \text{1 Set HPS lamp (70 W)} &= \text{P } 740 \end{aligned}$$



COST OF YELLOW LIGHT BULBS

2. SL (DAY LIGHT) Lamps

(COST OF WHITE LIGHT)

$$\begin{aligned} \text{1 pc SL lamp (105 W)} &= \text{P } 1,700 \\ \text{1 pc SL lamp (55 W)} &= \text{P } 750 \end{aligned}$$



COST OF WHITE LIGHT BULBS