

ENERGY EFFICIENCY VADODARA MUNICIPAL CORPORATION

Vadodara Case study



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PICTURE GALLERY

LIGHTING EFFECT OF CONVENTIONAL INSTALLATIONS



LIGHTING EFFECT OF DESIGNE BASED INSTALLATIONS (YEAR 2000)



COMPARISON OF CONVENTIONAL & DESIGNE BASED INSTALLATIONS

**POOR VISUAL GUIDANCE
ZEBRA EFFECT**

BEFORE INITIATIVE



AFTER INITIATIVE

BETTER VISUAL GUIDANCE



**STAGGERING DURING LEAN TRAFFIC TIMINGS (AFTER 11.00 p.m.) ON VIP ROAD
ADVANTAGES : SUBSTANTIAL SAVINGS IN ELECTRICAL CONSUMPTION (29%)**

STAGGERING



INTERNATIONAL LEVEL OF LIGHTING 35 LUX (YEAR 2008)



COMPARISON OF DESIGN BASED LIGHTING 2000 & 2008

LIGHTING AFTER 2000



STAGGERING DURING LEAN TRAFFIC TIMINGS (AFTER 11.00 p.m.) ON VIP ROAD
ADVANTAGES : SUBSTANTIAL SAVINGS IN ELECTRICAL CONSUMPTION (29%)

STAGGERING



LIGHTING IN 2008



DIMMING



LIGHTING COMPARISON: VMC WITH INTERNATIONAL CITY

VADODARA



NO LIGHT POLLUTION

540 W LOAD ON A POLE :42 M SPAN
250 W HPSV LAMP X 2

ILLUMINATION LEVEL 35 LUX
UNIFORMITY 40% HEIGHT 10 M

INTERNATIONAL CITY



LIGHT POLLUTION

2700 W LOAD ON A POLE : 60 M SPAN
600 W HPSV LAMP X 4

ILLUMINATION LEVEL 35-40 LUX
UNIFORMITY 50% HEIGHT 20 M

ILLUMINATION LEVEL : 24x5 T5 Lamps & Design based HPSV Installations

10.80 KW

13.44 KW



**Annual Electrical
Consumption Kwh for one
km length of road**

T5
43362
kwh/year

HPSV
35600 kwh/year
After using Dimming Technology

Poor visibility, service delivery & uniformity which leads to poor safety & security of Citizens.

Better visibility, service delivery & uniformity, Improved safety & security of Citizens.

THANK YOU



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