

## Electrical

### History

The maintenance of street lights has been transferred to Municipal Corporation of Hyderabad on 01/01/2004. Prior to that, Operation and maintenance of street lights has been looked after by Distribution companies.

Electrical Wing of GHMC is looking after the operation and maintenance of street lights as well as installations of new street lights as per standards and requirement of the public. The GHMC street lighting operation management system is covered in 5 Zones in 150 Wards and is being maintained by 57 labour contract agencies. The street lighting activity is supervised by circle wise AEs, Dy.EEs & EEs under supervision of Superintending Engineer (Electrical), GHMC. 13 Nos. of ladder vehicles are available for attending street light maintenance works.

### Statistics of Street Light fittings & poles

The Greater Hyderabad Municipal Corporation is now maintaining 4,65,043 street lights as mentioned below

<b>Fittings</b>		
<b>Wattage</b>	<b>Fitting in Nos.</b>	
40W Tube lights	17767	
70W HPSV lamps		
150W HPSV lamps	240186	
250W HPSV lamps	91227	
250W MH lamps	3758	
400W MH lamps	20775	
120W LED lights	913	
210W LED lights	516	
200W LED lights	36	
180W LED lights	12	
160W LED lights	239	
90W LED lights	76	
70W LED lights	9	
60W LED lights	172	
40W LED lights	20	
45W LED lights	38	
30W LED lights	171	
<b>Total Fittings</b>	<b>4,65,043</b>	
<b>Street light poles</b>		
TSSPDCL Poles	2,52,509	
GHMC Poles	78,838	
GHMC Mini/High Masts	6,531	
<b>Total poles</b>	<b>3,37,878</b>	
<b>Expenditure Details (2016-17)</b>		
CC Charges per annum	Rs.179.32 Cr	
R&M of street lights	Rs.38.5 Cr.	

**The Energy consumption towards burning of street lights is 240.80 M.U. (2016-17)**

## **LED IMPLEMENTATION PROJECT:**

1. Government has issued G.O.No.194 for implementation of energy conservation and efficiency measures in greater Hyderabad Municipal Corporation on annuity basis through Energy Efficiency Services Limited.
2. GHMC has entered into agreement with EESL on 29.05.2017 for implementation of LED project in GHMC jurisdiction. All the conventional street lights will be replaced with energy efficient LED street lights under this project.
3. The details of the project are as follows:
  - Capital cost of the Project: Rs.271.40 Crs.
  - No Upfront capital cost to GHMC
  - Assured energy saving : 55%
  - GHMC will pay back to EESL through monetised energy savings.(ESCROW Account)
  - Free O& M support during the contract period of 7 years.
  - Free replacement warranty of street lights for manufacturing defects.
  - Min. glowing rate of street light shall be 98%.
  - Illumination level as per national lighting code.
  - Necessary refurbishment works to existing street lighting system.
  - **Centralized control and monitoring to enhance operational efficiency.**
4. EESL has started the work on 06/07/2017. More than **3.1 Lakhs** conventional lights are replaced with LEDs as on 31/10/17.
5. 100% conventional lights are replaced with LEDs in Quthubullapur, Gajualaramaram, Alwal , R.C.Puram& Patancheruvu circles as on October-2017.
6. The project is expected to complete by **December-2017**.

### **7. ENERGY SAVINGS:**

The monthly power consumption and electricity bills came down since the beginning of LED replacement. The details are as follows.

Month	2016-17		2017-18		Savings	
	Consumption in Units	Amount in Lakhs	Consumption in Units	Amount in Lakhs	Consumption in Units	Amount in Lakhs
<b>July</b>	196,71,116	1509.00	183,95,143	1,417.13	12,75,973	91.87
<b>August</b>	201,07,519	1490.67	175,69,346	1,358.11	25,38,173	132.56
<b>September</b>	201,29,582	1,532.49	152,07,605	1,187.02	49,21,977	345.47
<b>Totals</b>	<b>599,08,217</b>	<b>4,532.16</b>	<b>511,72,094</b>	<b>3,962.26</b>	<b>87,36,123</b>	<b>569.90</b>

**Energy saved since the beginning of the project : 87, 36,123 Units.**

**Savings in CC Bills : Rs. 5.70 Crs**

### **Complaint redressal:**

In case of non burning of street lights in a particular zone/circle citizen may be contact as per the details available in link <http://ghmc.gov.in/KeyContacts.aspx> , also register the grievance through GHMC call centre (040- 21111111), MY GHMC APP (or) [http://210.212.212.123/ghmc/csp/home\\_csp](http://210.212.212.123/ghmc/csp/home_csp)

**SOLAR ROOFTOP:**

- GHMC proposed to install Solar roof top power plants on GHMC owned building. M/s. The Energy and Resources Institute surveyed 43 buildings and estimated system capacity of the buildings is 941 Kwp.
- Solar Energy Corporation of India (SECI) has agreed to install rooftop Solar power plants under RESCO mode for the buildings having potential of 40kWp or more.
- No. of buildings entitled for RESCO model are 9nos. with estimated capacity of 486kWp.