

# Energy Saving Street Light Fittings

## Background:

There are about 40000 streetlight fittings with about 8000 fittings of 250 watts. Generally about 20% fittings were not working. Lots of headache and problems in maintaining these fittings and wirings. Requires lots of manpower. Switching on and switching off activities may not get done in time.

## Vision:

To upgrade the standard of service to 95%, saving electricity to the maximum extent possible without affecting the illumination, to ensure minimum requirement of the staff for maintenance.

## Proposal

Private party to replace all 250 watts fittings with energy saving fittings, give us replaced fittings to corporation, maintain comprehensively street lights for next 7 years and share the energy saving with the corporation. Open tender led to finalization of a party that shared energy saving in the ratio of 77:23 with the corporation.

## Benefits:

1. We have replaced 10000 fittings with energy saving ones. 250 watts fittings get replace with 96 or 120 watts (depending upon the width of the road).
2. Average saving is about 62%, of which we get 23% free of cost.

3. If any fitting is not working on any day, it has to be repaired within 24 hrs. and we fine 100 rupees for each day afterwards. However at any time at least 95% fittings should be working.
4. There is no requirement of maintaining these street lights now – for 7 years – leading to tremendous saving in electricity.
5. We are exploring if we can get any carbon credits – agreement says that if we get, we will share 50-50% with the party.
6. This model ensures that only if energy saving fittings actually save energy, corporation pays.

**Issues:**

1. This model works only for 250 watt fittings as there is other wise not enough savings to fund private party.
2. Illumination has to be what is directed by IRC, and sometimes if our poles are not designed properly – like their height or distance – it may require additional wattage.
3. Generally there is an immediate feedback if any fitting is not working.
4. As energy saving has to be clearly defined we have to give all the poles on one feeder.
5. Corporation has decided to install only energy saving fittings in future – whole of MIDC are has be white-lit.
6. 99% complaints about street lights have vanished.