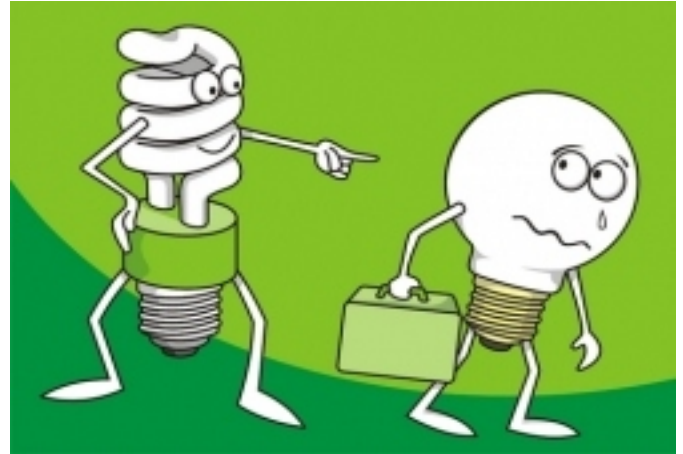


# A comparison between LED, CFL & Incandescent Lamp

## Why we chose CFL over Incandescent Lamps?

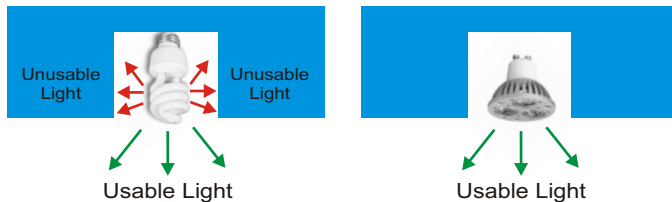
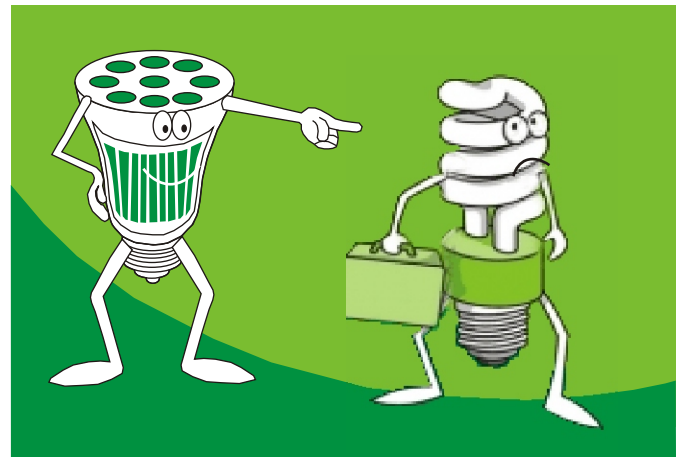
A compact fluorescent lamp (CFL) was designed to replace an incandescent lamp, which directly fits into light fixtures formerly used for incandescent lamps. The lamps use a tube which is curved or folded to fit into the space of an incandescent bulb, and a compact electronic ballast in the base of the lamp. It gives the same amount of light as compared to incandescent lamps but with less power consumption (typically one fifth) and have a longer rated life (six to ten times).



## Why should we choose LED Lamps over CFL?

Now it is time to replace LED Lamps over CFLs because of the following advantages.

- Less greenhouse emissions
- Low electricity bill
- More light output
- Unlike CFL, turns on instantly
- More life span (> 50000 Hrs.)
- No wastage of light



| Parameters                              | LED         | CFL          | Incandescent Lamp |
|---|-------------|--------------|-------------------|
|   |             |              |                   |
| Life                                    | 50,000 Hrs. | 10,000 Hrs.  | 1500 Hrs.         |
| Power consumption for same light output | 6 - 8 Watt  | 12 - 15 Watt | 60 Watt           |
| Units per year                          | 29 KWH/yr.  | 55 KWH/yr.   | 219 KWH/yr.       |

### Incandescent Lamp



#### Pros

Cheaper & easily available, nothing else.

#### Cons

About 1,500 hours of life span and they suck at least 75% more energy than the other two options.

### CFL



#### Pros

CFL light bulbs have an average life span of 10,000 hours. These use approximately 75% less energy than the traditional incandescent bulb.

#### Cons

These contain mercury and have to be disposed off properly.

### LED Lamp



#### Pros

These light bulbs have a lifespan of approximately 60,000 hours. This uses approximately 82% less energy than the traditional incandescent bulb. LEDs are unbreakable. LEDs are RoHS compliant, unlike the CFL light bulbs they do not contain mercury.

#### Cons:

The light tends to be very directional. You can save money in the long run but starting cost is higher.