GREEN INITIATIVE AT A GLANCE

Energy conservation by switch labeling at SED

When confronted with multiple switches for the lights on a floor, a person's typical reaction would be to switch on all the lights if the person is unsure of which switch controlled which section of lights on the floor.

When our team of volunteers saw this, we saw not only the opportunity to give people the chance to switch on the right lights, we also saw the possibility of giving them the chance to switch off the right lights at the end of the day.

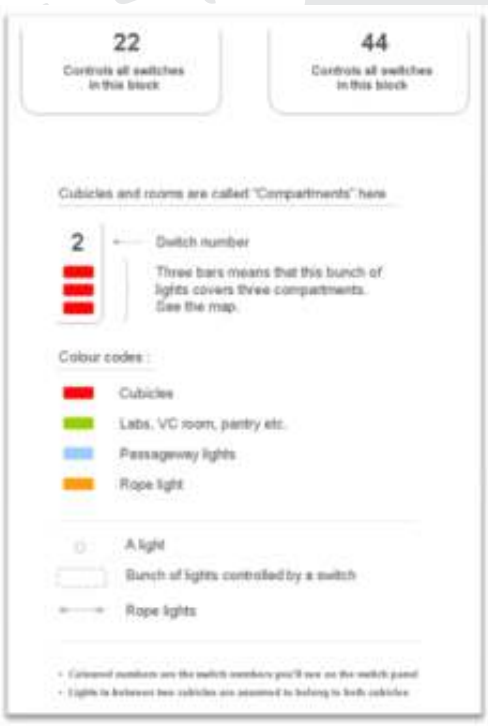
During a period of two weeks, four volunteers scraped up whatever free time they had, took advice and permissions from all the necessary authorities, manually mapped out each and every lightbulb onto image editors and power point and created an intuitive coloured switch map for the floor.

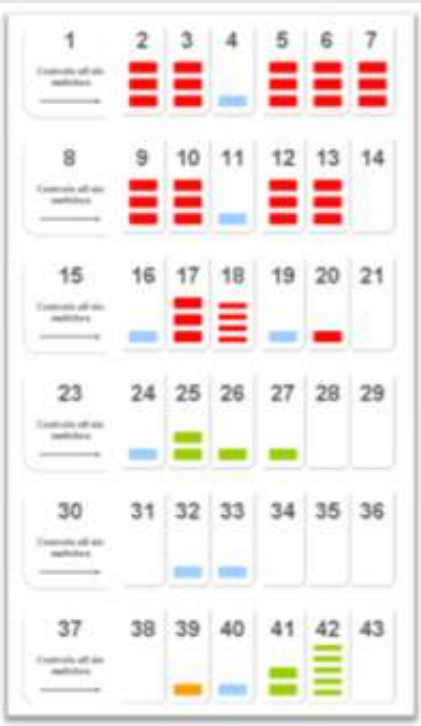
Colour indicating which lights could be switched on and off at will and **bars** indicating how many sections on the floor it affects. Another colour indicating which lights had to be kept switched on throughout the day and a third colour indicating which lights had to be switched on only at night.

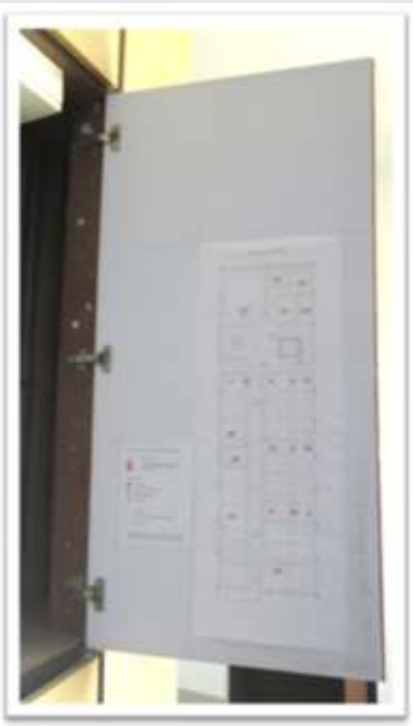
That particular section did not have an energy meter which could show us the amount of energy conserved, but we definitely measured a very high rating on the happiness meter of our colleagues

Colleagues were very happy with this effort, because they were energy conscious and it helped them avoid confusion in switching on and off the necessary lights.

- Team SED







Green Desk

E waste: Global Phenomenon

IT industry is growing by tremendous speed all over the world. Off course this has helped Indian economy to grow faster. Along with economic growth and availability of electronic goods in the market; consumer's tendency of replacing their household electronic equipments frequently with upgraded models has increased. This leads to higher rate of obsolescence and increasing piles of e waste i.e. Electronic waste. This article is intended to underline concerns about generation and management of e waste.

E waste includes any discarded electronic or electric device or its part, which is not suitable for further use.

Typical Composition of E Waste

Typically e waste is comprised of elements such as ferrous and non ferrous metals, plastic and hazardous pollutant. The extent of hazardous nature of e waste is dependent upon its volume being generated and content of toxic material in it. All these ingredients are of non biodegradable in nature and hence they do not mix with soil and therefore need an attentive treatment before it spoil environment further.

- CRT monitors and TVs contain an average of 4 pounds of lead each. Excessive lead and other toxins pose a problem in landfills because they can leach into groundwater.
- Batteries such as automotive batteries and house hold batteries contain lead, Mercury and Cadmium.

All these components are extremely toxic and carcinogenic in nature.

Most common practices of E- waste collection.

In most of the cases, these e waste materials are collected through scrap dealers. From them, they end up in the unorganized recycling places. Unattended electronic junks normally get mixed with household waste, which finally gets disposed off at landfills. Other rudimentary techniques such as acid leaching open air burning damages environment severely. Fraction of e waste may contain valuable metals such as Copper, Aluminium, Gold, and Silver. Cherry Picking by recyclers to recover these precious metals, leads to improper disposal of rest of the material.

E waste management.

Considering the severity of the problem, it is imperative that certain management options have to be adopted to handle it in proper sense. Management of any kind of waste begins at the site of generation only. Also Waste prevention is perhaps most preferred way of dealing with the problem.

- While buying any new product opt for gadgets which are energy efficient and employs technologies such as use of recycled plastic, lead free, Halogen free etc.(i.e ecolabelled product)
- E-wastes should never be disposed with garbage and other household wastes. This should be segregated at the site and sold or donated to various organizations.
- More emphasis should be given on designing of Product with fewer amounts of hazardous materials content.
- Sensitization of consumers and manufacturers of electronic products on issues related to environmentally sound management of e- waste.

Since overall challenges, issues and concerns regarding e waste management are same faced by other developing countries also, making it as a Global Phenomenon.

- **Ms. Janhavi Biwalkar,** Environment

Green Quotient

1. Which among the following is most energy efficient?
A. Incandescent bulb
B. Fluorescent light
C. Compact fluorescent lamp

2. If you design a solar house, how much heat can be produced from solar energy?
A. 60% B. 80%
C. 100% D. All of the above

3. In rooftop rainwater harvesting, how many minutes should you wait before collecting the rainwater?
A. None B. One hour
C. 15 minutes D. 30 minutes

4. What is the highest light-to power efficiency achieved by solar cell?
A. 68.2% B. 15.7%
C. 54.3% D. 42.8%

5. How efficient are typical solar cells?
A. 35% B. 6%
C. 22% D. 51%

6. Gasoline is produced by refining which fossil fuel?
A. Natural gas B. Coal
C. Petroleum D. Propane

January Issue
The winner for last issue of Green Quotient is
Mr. Jeetendra Khubchandani
Congratulations to our Winners!

Green Canvas

The Maharashtra State Biodiversity Board had organized an **amateur photography** competition on 22nd May, 2013 in Pune.

The two themes for the competition were:

a. Biodiversity of Maharashtra - Wildlife (Flora and Fauna)

b. Biodiversity of Maharashtra - Ecosystems of Maharashtra

Mr. Tushar Patil was awarded a special prize for his photographs

Tushar is the son of Mr. Balaji Patil working in Transmission department.

Here are some of his clicks-


Mr. Tushar Patil


Bhira Forest


Morning at Karnala Forest


Sun set through the Mangroves


Crab protecting their young ones


Psyche butterfly


Small Cupid butterfly