

"eBriefing on Resource Efficiency" Reed Consulting Bangladesh Ltd.



April 2015

Efficient Lighting

Reed Consulting Bangladesh Ltd. offers energy efficiency improvement consultancy involving a quick walk-through followed by a detailed energy assessment with a report including recommendations for saving energy and money.

Lighting can be a major energy use in offices and factories. A large amount of energy can be saved by using an efficient design and energy saving lights. Efficient lighting can save up to 80% of electricity compared with traditional light bulbs providing the same light level. The cost of energy saving lights continues to drop while the quality continues to improve.

Saving energy helps the environment by reducing the expected impacts of climate change. Efficient lighting can make offices and factories '**Greener**' and more affordable to operate.



Significant energy savings are possible using energy efficient equipment, effective controls and careful design. Energy efficient lighting produces less heat and so saves some of the energy that would otherwise be used by office air conditioners. Electrical lighting design also strongly affects individual performance and comfort by maintaining adequate and appropriate illumination while controlling reflection and glare. An efficient

lighting design can reduce up to 70% cost of electricity for lighting. Lighting is not just a high priority when considering factory floor design; it is also a high return, low-risk investment. By installing new lighting technologies, businesses can reduce the amount of electricity consumed and the energy costs associated with lighting.

The following are a few examples of energy-saving opportunities in Lighting:

Light fittings: Use of special 'energy saver' reflectors can reduce operating costs without sacrificing the quality of light. These reflectors can also significantly increase useful light output compared to standard reflectors.



Turn off unnecessary lights: The moment a light is turned off it stops using energy, so savings add up by the minute. Use of natural lighting near the window or any other places whenever possible could help to turn off unnecessary lighting. Movement detectors can be used to turn off lights when there is no movement i.e. when a room is not in use.



Use LED spot lights for sewing machines:

In most garment sewing area, lights in point of use is the main criteria for operation and LED (Light Emitting Diodes) lamps are an excellent option for spot lighting. They last much longer than standard lamps and produce very little heat. LED spot lights are a combination of good appearance and function. They also deliver excellent results.

For further information about engineering consultancy and waste and energy and water minimisation please contact our Principal Textile Engineer Dr. Mohammad Abbas Uddin abbas.uddin@reedconsultingbd.org.

RCB provides consultancy in Energy Efficiency, Production Engineering, Process Improvement, Water and Waste Minimisation.

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