



ERGONOMICS OF GREEN JOB (RENEWABLE POWER GENERATION, WASTE MANAGEMENT, RECYCLING)

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Abstract:

This paper emphasizes the goal of Ergonomics. As a result of the changing climate the way we choose to live, work, consume, travel, communicate, generate energy, produce food & deal with the waste. Ergonomics have an important role to play in ensuring that the necessary changes are acceptable to those they affect. The potential for own involvement is broad & includes renewable power generation, waste management, recycling, designing energy conservation buildings, from utilizing best out of waste, designing information to influence reducing waste of renewable power & designing "Green Products". This helps in minimizing carbon {CO₂} emission & reduced energy bills by two thirds is the cheapest way to cut green house gas emission. As a global consumer demand products, services & techniques that treat the planet more gently than in the past. This article supports the sustainable development practices to expand the global network & helps to conserve environmental factors between human & nature.

Keywords: ergonomics, green products, renewable power generation

Introduction:

The word "Ergonomics" comes from Greek words. "Erg on" meaning work & "Nomo's" meaning "Laws". The word is used to describe the laws of ergonomics factors which also involve one factor like environmental factors like air quality, excessive noise, sick building, solar energy conservation, e-waste, waste management, recycling & reuse of the available resources. Ergonomics of green job means earth friendly, in short but never ended "Be Eco friendly" or not harmful to the environment. This refers to the products that contribute to the green living practices that help to conserve natural resources like energy, water, air etc without harming nature & to maintain the eco balance between human & nature. By adopting eco friendly ergonomics one can engage eco friendly habits by being more conscious of how one can use resources. Truly practicing green ergonomics, one can keep both environment & human safety. At the best the product is non-toxic at its





minimum ,both eco friendly norms can include use of organic ingredients ,products made by recycled material can be degraded easily without polluting land. Bio degradable products break down through natural decomposition which is less toxic to the ecosystem. Eco friendly practices involve habits to help you use less & make the most of what you have.

Adding more to the paper, minimize the use of non renewable construction materials & other resources such as energy & water & minimize the use of reusable ,bio based materials can be effective practices. Human creativity & labor forces is most valuable renewable sources. Identify way to reduce the amount of waste generated through the waste reduction plan ,adopt the policy "Waste equals food". Evaluate all products & system for their ability to recycle when they reach at the end of useful life. Preference should be given to the products that are non energy intensive & recycled with minimum contamination by foreign debris. Renewable energy generate from natural resources such as rain ,wind ,sunlight which can be naturally replenishable continuously. Many agricultural enterprises generate waste such as cow dung ,fodder, dry paddies ,unused vegetables such waste can be digested or incinerated to produce energy. Recycling is also one of the eco friendly which is helpful & can stop destruction and degradation of environment. In more technical term recycling is, collecting, separating, processing & marketing a material that is otherwise have been thrown away. This object can be reused to make new products that can be recycled although every product does not have that quality .Recycling plastics, glass .Aluminum considered as non biodegradable & source of toxic waste. Recycling of these materials can be more recycled for eco friendly practices. Rain water harvesting {collecting natural rainwater}, using it prove to be more helpful in increasing underground water level naturally for future use for our generation. Carbon dioxide is a green house gas that is a major contributor to global warming .We are aware of the fact that trees use up Carbon dioxide from atmosphere .Each recycling of above material saves 15 trees ,that why recycling is encouraged.





Lower energy building categories is a technology pioneering building development that facilitates use of low level of 'Energy-in-use'. The first target of low energy building design is to save energy account nearly about 92-97% of their lifetime energy. Low energy buildings works on a technique & system to deliver a comfortable environment with low energy use. Buildings can be design to make the best use of sunlight by arranging window to allow maximum natural sunlight to enter in the building .Another reason, it saves enough energy to light 60 watt bulb for 24hrs straight. Exploring ways to improve drinking water & waste water efficiency management ,harvesting of water for safe water in innovating way & generally minimizing water use in various sectors such as hotels ,car washing centers, laundry ,water treatment plant ,theme water park, swimming pool , natural landscape design to preserve the natural habitat & heritage is emphasize.

Aim & Scope:

- Ergonomics of green job makes an investment but it has big benefits to human & planet which leads to healthier happier planet earth & will direct flow through bottom line.
- To make people better understood to planet & environment so that to reduce the amount of waste generated through various resources& converted them in to renewable. By doing this we can save planet earth from global warming & cabondioxide emission, stops deforestation.
- To find out more ecofriendly alternative ways, biodegradableways so we should start using handmade products such as, paper bags, shopping bag made out of paper, handmade paper sheets.
- To start the use of ecological responsible vehicles so that the need of transport results in eco wheels this is a green solution.
- As a part of green ergonomics to introduce the culture of '**Go Green**' message for common person which is a very common term that is easily understood by the common man.





- As an important part of this paper, to introduce the strategies for retaining natural habitat by the mechanism of renewable, recycle, reuse, retain ecological resource by human.

The Study:

Water has always been precious. A waste water treatment unit can remove solvents from hazardous waste level & then evaporates, atomize the treated water to the outside air as water vapour. This is primarily important because only a small portion of total water reserve that the earth can be used for day to day activities. Waste water from machines that use to clean cloths but washed out water can be utilized for so many other purposes known as 'Gray water'. Manage the waste water onsite with the world around us getting increasingly, digitalized the use of electronic appliances grown such as mobile, laptop air conditioner television; tablets touched every aspects of life every day. The growing usage of electronic equipments has made electronic waste which commonly referred as 'E Waste' management it's a major management its a major challenge everywhere including Indian country.

An ASSOCHAM {Associated Chambers Of Commerce & Industry Of India} report has found that E Waste connected to health risk may result direct related to toxic byproducts to affect human & planet earth as well as universe. The design of building, construction techniques, and maintenance & personal care products, occupant a large number of factors needs to be consider ensuring healthy indoor air quality. Eco practices are one of the emerging trends in hotel housekeeping. Reducing waste through energy saving & waste management without affecting guest satisfaction. Ozone treatment is also emerging as clean & environment techniques. Micro fibers as a cleaning factor has greatly ease in cleaning function as its highly resistant to dirt & dust. It has a Star shape{*}grooves of the fibers. The filaments & nylon core cleans the surface by using just a water without the surface by using just a water without addition of floor cleaners chemical type. Solar energy is not a cycle; It's a flow from the sun to the biosphere. This is one of the four basics of ecosystem windows through which we can began to innovate solar mechanism that helps to conserve energy. There are





environmental friendly & cost effective as well. Companies sometimes label their products as eco friendly, without being truly so to increase their product sale. Avoid purchasing '**Green Washed**' products. Follow energy star programme or ecologically conscious consumer products. Like other industry hotels are also practicing ergonomics like **Ecotels** are environmental friendly hotels, being sensitive towards the daily practices of hotel staff to provide service to the guest. The Orchid Hotel, Mumbai, is Asia's first & most popular five star ecotel hotel.

Readers Benefit:

Some examples of green ergonomics solutions help in renewable, recycle & reuse are,

*Use an eco friendly ergonomics at home, office, workplace, building construction although it plays an important role to improve ecosystem.

*Use the products & services which are ergonomically design to reduce assistance with maintainence task.

***Ecokit** means containers, chopsticks& napkins, all food waste are biodegradable & turn in to compost. A 30% of land fill waste is a result from these efforts.

***Handmade sheet** ,paper made crafts it's a good way to recycle waste in to wonderful possibilities. Handmade paper is environment friendly as cotton rags & other waste products are converted in to some meaningful by recycling.

***Paper bags** are the ideal take away solutions for fast food outlets.

***Multiwall** hand bags is two to six bags, one sitting inside other are exceptionally strong ,because each layer carries its own share of weight of the products. So the bag can be used to shipped many materials at a time.

***Handmade notebook** is quite popular as they are eco friendly. These books are available in to various designs & colors. This books are directly engaged in to saving thousands of trees by stopping deforestation.

***Eco shoes** are the shoes, which can be recycled & reused. Many shoes making organization are coming forward with eco friendly shoes. The foot wares mostly comprise of recycled rubber, recycled plastic, waste products, textiles & other synthetic products.





***Eco wheels** by selecting right mode of transportations one can reduce the use of fissile fuel, these efforts by individual resulting reduce green house gas emission ***Small scale** on site solar fuel based energy generation & more stress to given on renewable, sustainable sources.

***Eco friendly paints** are produced from less than 250 chemical components' & 98% of these chemicals are derived naturally from plant materials & minerals. More use of these paints involves more use of naturally derived materials wax, natural pigments', tress resins which are natural pigment can be given more priority as they are non toxicing & have no color.

***Business** can also institute green ergonomics practices in adding bigger initiatives such as companywide recycling programme to conserve natural resources which eliminate pollution.

Merits & Demerits Of Green Ergonomics:

Going green can also potentially have negative & positive effects on the environment.

Increase business opportunity: Some green ergonomic commercial business & nonprofit institutions mandate only business that meet specific green standard can only bid their contract. They provides business opportunity to the businessman this improves annual revenue.

Reduce rebate & taxes: Going green business & institutions helped by state government, local municipal corporations, electricity company's offers reduce rebates & taxes amount.

Saves local jobs: Small efforts makes a big difference .By practicing green ergonomics ,by practicing social movement buying swadeshi(Buy local)saves local jobs.

Saves ecosystem: Green practices does not results in destructions of eco system it adds on positive prospective to ecosystem.

Green ergonomics associated with cost factor .Green products generates high cost involvement such as solar panels.

Time is one of the demerits in green product as they are made by time consuming procedure due to lack of proper resources. This sustanability does not occur overnight. It takes lots of time to pay back in their cost.





Adding recycling to the products slightly decreases productivity of goods & product.

Green conversions required an increase capital outlay & investment .This decreases annual profit .Some time it may strain the budget.

By adopting green ergonoms to your work, companies you can generate positive public image by promoting your environmental contributions to media through press release to draw attention, encourage to others.

Development of alternative fuel & innovative green movement is an effort to reduce reliance on nonrenewable natural resources.

**SO BE ECO FRIENDLY, GO GREEN
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